Messages and Codes

Version 6
Messages and Codes

Version 6
Note!

Before using this information and the product it supports, be sure to read the general information under Appendix E, "Notices" on page 1081.

Third Edition, Softcopy Only (May 2001)

This edition applies to Version 6 of DB2 Universal Database Server for OS/390, 5645-DB2, and to any subsequent releases until otherwise indicated in new editions. Make sure you are using the correct edition for the level of the product.

This softcopy version is based on the printed edition of the book and includes the changes indicated in the printed version by vertical bars. Additional changes made to this softcopy version of the manual since the hardcopy manual was published are indicated by the hash (#) symbol in the left-hand margin. Editorial changes that have no technical significance are not noted.

© Copyright International Business Machines Corporation 1982, 1999. All rights reserved.
US Government Users Restricted Rights – Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.
## Contents

### Section 1. Introduction

- Introduction to this book and the DB2 library ............................................. 3  
- Who should read this book ................................................................................. 3  
- How to use this book ............................................................................................. 3  
- How to use the DB2 library ................................................................................. 8  
- How to obtain DB2 information .......................................................................... 10  
- Summary of changes to DB2 UDB for OS/390 Version 6 ................................. 11  
- Summary of changes to this book ..................................................................... 16  

### Section 2. SQL Return Codes

- SQL Return Codes .................................................................................................. 19  
  - Introduction ........................................................................................................ 19  
  - Checking the execution of SQL statements ......................................................... 19  
  - SQLCODE ........................................................................................................... 19  
  - SQLSTATE ......................................................................................................... 19  
  - Successful execution SQL code .......................................................................... 20  
  - Error SQL codes ................................................................................................. 31  

### Section 3. DB2 Messages

- DB2 Messages ..................................................................................................... 119  
- DSNA... Messages ............................................................................................... 121  
- DSNB... Messages ............................................................................................... 123  
- DSNE... Messages ............................................................................................... 161  
- DSNF... Messages ............................................................................................... 181  
- DSNH... Messages ............................................................................................... 183  
  - Message line numbers .................................................................................... 183  
  - Message severity codes .................................................................................. 183  
  - Source tokens in messages ........................................................................... 183  
- DSNI... Messages ................................................................................................ 213  
- DSNJ... Messages ................................................................................................ 219  
- DSNL... Messages ................................................................................................ 255  
- DSNM... Messages ............................................................................................... 293  
- DSNN... Message ............................................................................................... 295  

© Copyright IBM Corp. 1982, 1999
DSNP... Messages ............................................................ 297
DSNR... Messages ............................................................ 307
DSNT... Messages ............................................................ 315
DSNU... Messages ............................................................ 369
DSNV... Messages ............................................................ 467
DSNW... Messages ............................................................ 483
DSNX... Messages ............................................................ 495
DSNY... Messages ............................................................ 509
DSNZ... Messages ............................................................ 511
DSN1... Messages ............................................................ 513
DSN2... Messages ............................................................ 537
DSN3... Messages ............................................................ 545
DSN7... Messages ............................................................ 555
DSN8... Messages ............................................................ 561
DSN9... Messages ............................................................ 571

Section 4. DB2 Codes .......................................................... 577

    Section 4. DB2 Codes ....................................................... 579
    X'C1......' Codes ............................................................ 581
    X'C2......' Codes ............................................................ 589
    X'C3......' Codes ............................................................ 619
    X'C5......' Codes ............................................................ 623
    X'C6......' Code .............................................................. 627
    X'C8......' Codes ............................................................ 629
    X'C9......' Codes ............................................................ 631
    X'D1......' Codes ............................................................ 657
    X'D3......' Codes ............................................................ 691
    X'D4......' Codes ............................................................ 807
Section 5. IRLM Messages and Codes

IRLM Messages and Codes
IRLM messages

IRLM Error Return and Reason Codes
CHANGE request
IDENT request
LOCK request
NOTIFY request
PLEXIT request
PURGE request
QUERY request
QUIT request
RETLOCK request
STAT request
SYNC request
TAKEOVER request
UNLOCK request
<table>
<thead>
<tr>
<th>Section/Appendix</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>VERIFY request</td>
<td>1035</td>
</tr>
<tr>
<td>IRLM Abend Reason Codes</td>
<td>1037</td>
</tr>
<tr>
<td>Section 6. SNA CODES</td>
<td>1039</td>
</tr>
<tr>
<td>SNA Sense Codes</td>
<td>1041</td>
</tr>
<tr>
<td>Appendixes</td>
<td>1047</td>
</tr>
<tr>
<td>Appendix A. CICS Transaction Abend/Dump Code</td>
<td>1049</td>
</tr>
<tr>
<td>Appendix B. Problem determination</td>
<td>1051</td>
</tr>
<tr>
<td>Diagnostic items</td>
<td>1051</td>
</tr>
<tr>
<td>Resource types</td>
<td>1053</td>
</tr>
<tr>
<td>ABEND codes associated with DSN1COPY misuse</td>
<td>1055</td>
</tr>
<tr>
<td>Appendix C. SQLSTATE Values—Common Error Codes</td>
<td>1059</td>
</tr>
<tr>
<td>Using SQLSTATE values</td>
<td>1059</td>
</tr>
<tr>
<td>Appendix D. New, Changed, and Deleted Messages and Codes</td>
<td>1073</td>
</tr>
<tr>
<td>New messages and codes</td>
<td>1074</td>
</tr>
<tr>
<td>Changed messages and codes</td>
<td>1077</td>
</tr>
<tr>
<td>Changed SQLSTATEs</td>
<td>1079</td>
</tr>
<tr>
<td>Deleted messages and codes</td>
<td>1079</td>
</tr>
<tr>
<td>Appendix E. Notices</td>
<td>1081</td>
</tr>
<tr>
<td>Programming interface information</td>
<td>1082</td>
</tr>
<tr>
<td>Trademarks</td>
<td>1082</td>
</tr>
<tr>
<td>Glossary</td>
<td>G-1</td>
</tr>
<tr>
<td>Glossary</td>
<td>G-3</td>
</tr>
<tr>
<td>Bibliography</td>
<td>B-1</td>
</tr>
<tr>
<td>Bibliography</td>
<td>B-3</td>
</tr>
</tbody>
</table>
Section 1. Introduction

Introduction to this book and the DB2 library .......................................................... 3
Who should read this book ............................................................................................. 3
How to use this book ...................................................................................................... 3
  Message type codes ...................................................................................................... 5
  DB2 message severity codes ......................................................................................... 5
  DB2 abend completion codes (X’04E’ and X’04F’) ..................................................... 6
  DB2 diagnostic information ......................................................................................... 7
  MVS abends resulting from DB2 operation ............................................................... 7
How to use the DB2 library ............................................................................................. 8
How to obtain DB2 information ...................................................................................... 10
  DB2 on the Web .......................................................................................................... 10
  DB2 publications .......................................................................................................... 10
    BookManager® format .............................................................................................. 10
    PDF format ................................................................................................................ 10
#  CD-ROMs and DVD ...................................................................................................... 10
  DB2 education ............................................................................................................ 11
  How to order the DB2 library ...................................................................................... 11
  Subscription through the Publication Notification System (PNS) ............................ 11
  Summary of changes to DB2 UDB for OS/390 Version 6 ........................................... 11
    Capacity improvements ............................................................................................. 12
    Performance and availability .................................................................................... 12
    Data sharing enhancements ....................................................................................... 13
    User productivity ....................................................................................................... 13
    Network computing .................................................................................................. 14
    Object-relational extensions and active data ............................................................ 14
    More function ........................................................................................................... 15
    Features of DB2 for OS/390 ...................................................................................... 15
    Migration considerations ......................................................................................... 15
Summary of changes to this book ................................................................................. 16
Introduction to this book and the DB2 library

This chapter contains specific information about this book and a general overview of the DB2 library.

Throughout this book, “DB2” means the program product IBM DATABASE 2 Universal Database Server for OS/390 (DB2 for OS/390). Other DB2 products are given their complete names or abbreviations.

Who should read this book

This book, IBM DATABASE 2 Universal Database Server for OS/390 Messages and Codes, lists messages and codes issued by DB2, with explanations and suggested responses. This book is intended for users and system programmers who might encounter DB2 messages and codes.

How to use this book

This book consists of the following six sections and four appendixes:

- “Section 1. Introduction” on page 1 explains the different types of messages and codes that DB2 generates.
- “Section 2. SQL Return Codes” on page 17 lists the SQL return codes.
- “Section 3. DB2 Messages” on page 117 lists the various DB2 messages.
- “Section 4. DB2 Codes” on page 577 lists the various DB2 codes.
- “Section 5. IRLM Messages and Codes” on page 1009 lists the various IRLM messages and codes.
- “Section 6. SNA CODES” on page 1039 lists the SNA codes.
- Appendix B, “Problem determination” on page 1051 lists the diagnostic items and resource types you can use to resolve problems.
- Appendix C, “SQLSTATE Values—Common Error Codes” on page 1059 lists the error code SQLSTATE values. These values provide common return codes for common error conditions.
- Appendix D, “New, Changed, and Deleted Messages and Codes” on page 1073 lists the new, changed, and deleted messages and codes.

The introduction provides general information about DB2 messages and codes. You will be referred to it from appropriate places in the manual. However, it is recommended that you become familiar with this material ahead of time.

The SQL return codes are listed by numeric sequence. The DB2 messages are listed in order of their subcomponent identifier and further by their numeric identifier. The codes are listed by their hexadecimal ID and further by their numeric identifier. The IRLM messages and codes are listed by numeric sequence.
Message identifiers and CSECT names are used to identify messages. Unless the message is issued by a subcomponent operating outside the DB2 environment (such as the precompiler or attachment facilities), messages are preceded by a *subsystem recognition character* that is defined during system installation. The subsystem recognition character is not shown in the message texts in this book.

All DB2 message identifiers are eight to ten characters long. The first three characters are always DSN: it is the DB2 component prefix name. The fourth character is the *subcomponent identifier*: it identifies the subcomponent of DB2 that issued the message. Each subcomponent has an associated *hexadecimal identifier* (hex ID): it is the hexadecimal representation of the subcomponent identifier. The *numeric identifier* is three to five characters long and begins at the fifth character in the message. The numeric identifier is unique within the subcomponent. The last character of the message identifier is the *message type code*. It indicates the type of response that the message requires. A *subsystem identifier* is an optional field found after the message number: it is also known as the *csect-name*. Message identifiers and CSECT names have the following format:

```
DSNB209I DSNB1CHK
```

where:

- **DSN** is the DB2 subsystem prefix name.
- **B** is the subcomponent identifier; in this example B identifies the DB2 buffer manager and the hexadecimal ID for this subcomponent is X'C2'.
- **209** is the numeric identifier.
- **I** indicates that this message is for information only.
- **DSNB1CHK** is the csect name; it is an optional field.

The DB2 reason codes and subsystem termination reason codes are 4 bytes long. The first byte is always 00: it is the *high-order byte*. The second byte is the *hexadecimal identifier* (hex ID): it identifies the DB2 subcomponent. The last 2 bytes are the *numeric identifier*: it is unique within the subcomponent. The codes have the following format:

```
00E50041
```

where:

- **00** is the high-order byte.
- **E5** is the hexadecimal identifier; it identifies the DB2 agent services manager.
- **0041** is the numeric identifier.
Accompanying each message and code is the following information, when applicable:

**Explanation:** This section tells what the message or code means, why it occurred, and what caused it. To assist in diagnosing problems, the CSECTs that issued the message are also included. However, if the issuing CSECT is placed in the message text at run time, it is not included in the explanation.

**System Action:** This part tells what is happening as a result of the condition causing the message or code. If this information is not shown, no system action is taken.

**User Response:** If a response by the user is necessary, this section tells what the pertinent responses are and their effect. If this information is not shown, no user response is required.

**Operator Response:** If an operator response is necessary, this section tells what the pertinent responses are and their effect. If this information is not shown, no operator response is required.

**System Programmer Response:** If a response by the system programmer is needed, this part tells what the pertinent responses are and their effect. If this information is not shown, no system programmer response is required.

**Programmer Response:** If a programmer response is necessary, this part tells what the pertinent responses are and their effect. If this information is not shown, no programmer response is required.

**Problem Determination:** This section lists the actions that can be performed to obtain adequate data for support personnel to diagnose the problem. If this information is not shown, no problem determination is required.

**Message type codes**

The last character of a message identifier is the *type code*. Four type codes are used, as shown in the following list:

- **A** Immediate action
  
  Action is required immediately. The associated task does not continue until the requested action is taken.

- **D** Immediate decision
  
  Decision or action is required immediately. The associated task does not continue until the requested decision is made or action is taken.

- **E** Eventual action
  
  Action is required at some point; however, the associated task continues. All RC=8 error messages that are not host related (SOFT errors) have the E changed to a W in precompiler output when SQL(ALL) is in effect. All RC=8 errors (HARD errors) look the same as they have in the past.

- **I** Information only
  
  No action is required.

**DB2 message severity codes**

Messages issued by the precompiler subcomponent of DB2, as well as some messages issued by the service controller and utility subcomponents of DB2, provide severity codes. The specific meanings of the severity codes differ slightly for each of the subcomponents. In general, the higher the severity level, the more significant the situation.
Severity codes for these subcomponents are described at the beginning of the individual subcomponent sections in "Section 3. DB2 Messages" on page 117. They are also included in the individual messages, where appropriate.

DB2 abend completion codes (X'04E' and X'04F')

DB2 uses two system abend completion codes: X'04E' and X'04F'.

X'04E' and X'04F' identify:
- Internal errors encountered during DB2 operation
- Diagnostic information for problem determination
- Subsystem actions initiated by the DB2 subcomponent involved in the error

X'04E'

An X'04E' abend completion code indicates that DB2 detected an internal error and abended a DB2 internal task (TCB) or a user-connected task. Errors associated with an X'04E' abend completion code might be preceded by an MVS system code or by internal errors.

The diagnostic material generated by the X'04E' abend must be examined to determine the source of the error that actually resulted in a subsequent task or subsystem termination.

X'04F'

An X'04F' abend completion code indicates that DB2 detected a severe error and abended the entire DB2 subsystem. When an X'04F' is issued, DB2 determined that continued operation could result in the loss of data integrity. Errors associated with an X'04F' abend completion code might be preceded by an MVS system error or by one or more DB2 X'04E' abend completion codes.

Table 1 summarizes the diagnostic information and subsystem actions available to DB2 when these abend completion codes are issued. Some pieces of this information are not relevant to some error situations and will not help in problem diagnosis. In these cases, DB2 does not produce any diagnostic information that is unnecessary. The information that DB2 produces for a given error depends upon the specific problem. The MVS services that provide diagnostic information are discussed in "DB2 diagnostic information" on page 7.

<table>
<thead>
<tr>
<th>Explanation</th>
<th>X'04E'</th>
<th>X'04F'</th>
</tr>
</thead>
<tbody>
<tr>
<td>System action</td>
<td>• Internal DB2 task is abended</td>
<td>• The entire DB2 subsystem is abended</td>
</tr>
<tr>
<td></td>
<td>• Connected user task is abended</td>
<td>• User task with an active DB2 connection may be abnormally terminated with an X'04F'</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Possible MEMTERM (memory termination) of connected allied address space</td>
</tr>
<tr>
<td>Diagnostic information</td>
<td>• SVC dump</td>
<td>• SYS1.LOGREC entries</td>
</tr>
<tr>
<td></td>
<td>• SYS1.LOGREC entries</td>
<td>• VRA data entries</td>
</tr>
<tr>
<td></td>
<td>• VRA data entries</td>
<td></td>
</tr>
</tbody>
</table>

Table 1 (Page 1 of 2). Abend Completion Codes
Table 1 (Page 2 of 2). Abend Completion Codes

<table>
<thead>
<tr>
<th>Associated reason codes</th>
<th>X'04E'</th>
<th>X'04F'</th>
</tr>
</thead>
<tbody>
<tr>
<td>DB2 abend reason code</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Associated MVS system codes</td>
<td></td>
<td>MVS system completion codes and X'04E' codes that precede the X'04F' abend</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Location of accompanying codes</th>
<th>SVC dump title</th>
<th>Message DSNW050I</th>
</tr>
</thead>
<tbody>
<tr>
<td>Register 15 of SDWA section “General Purpose Registers at Time of Error”</td>
<td>SYS1.LOGREC entries</td>
<td>VRA data entries</td>
</tr>
<tr>
<td>SYS1.LOGREC entries</td>
<td>Message DSNV086E, which is sent to MVS system operator</td>
<td></td>
</tr>
</tbody>
</table>

DB2 diagnostic information

DB2’s functional recovery routines use MVS services to provide diagnostic information for assistance in problem determination.

The following MVS services provide diagnostic information:

- SVC dumps
  The DB2 abend completion code X'04E' uses the MVS SDUMP service to create SVC dumps. The content and storage areas associated with these dumps vary depending on the specific error and the state of the DB2 subsystem at the time the error.

- SYS1.LOGREC entries
  Entries are requested in the SYS1.LOGREC data set at the time of the error using the MVS SETRP service. The following are also recorded in SYS1.LOGREC:
  - Subsystem abnormal terminations
  - Secondary abends occurring in a recovery routine
  - Recording requests from recovery routines percolated to by the recovery termination manager.

- Variable recording area (VRA) data
  Data entries are added to the VRA of the SDWA by using an MVS VRA defined key. VRA data includes a series of diagnostic data entries common to both DB2 abend completion codes. Additional information is provided by the invoking subcomponent recovery routine during initial error processing or recovery termination manager percolation.

MVS abends resulting from DB2 operation

During DB2 operation, an abend can occur with an MVS system completion code. If you receive an MVS abend during DB2 operation, refer to the appropriate MVS publication.
How to use the DB2 library

Titles of books in the library begin with DB2 Universal Database for OS/390 Version 6. However, references from one book in the library to another are shortened and do not include the product name, version, and release. Instead, they point directly to the section that holds the information. For a complete list of books in the library, and the sections in each book, see the bibliography at the back of this book.

Throughout the library, the DB2 for OS/390 licensed program and a particular DB2 for MVS/ESA subsystem are each referred to as “DB2.” In each case, the context makes the meaning clear.

The most rewarding task associated with a database management system is asking questions of it and getting answers, the task called end use. Other tasks are also necessary—defining the parameters of the system, putting the data in place, and so on. The tasks associated with DB2 are grouped into the following major categories (but supplemental information relating to all of the below tasks for new releases of DB2 can be found in DB2 Release Guide):

Installation: If you are involved with DB2 only to install the system, DB2 Installation Guide might be all you need.

If you will be using data sharing then you also need DB2 Data Sharing: Planning and Administration, which describes installation considerations for data sharing.

End use: End users issue SQL statements to retrieve data. They can also insert, update, or delete data, with SQL statements. They might need an introduction to SQL, detailed instructions for using SPUFI, and an alphabetized reference to the types of SQL statements. This information is found in DB2 Application Programming and SQL Guide and DB2 SQL Reference.

End users can also issue SQL statements through the Query Management Facility (QMF™) or some other program, and the library for that program might provide all the instruction or reference material they need. For a list of the titles in the QMF library, see the bibliography at the end of this book.

Application Programming: Some users access DB2 without knowing it, using programs that contain SQL statements. DB2 application programmers write those programs. Because they write SQL statements, they need DB2 Application Programming and SQL Guide, DB2 SQL Reference, and DB2 ODBC Guide and Reference just as end users do.

Application programmers also need instructions on many other topics:
- How to transfer data between DB2 and a host program—written in COBOL, C, or FORTRAN, for example
- How to prepare to compile a program that embeds SQL statements
- How to process data from two systems simultaneously, say DB2 and IMS or DB2 and CICS®
- How to write distributed applications across platforms
- How to write applications that use DB2 ODBC to access DB2 servers
- How to write applications that use Open Database Connectivity (ODBC) to access DB2 servers
How to write applications in the Java™ programming language to access DB2 servers

The material needed for writing a host program containing SQL is in DB2 Application Programming and SQL Guide and in DB2 Application Programming Guide and Reference for Java™. The material needed for writing applications that use DB2 ODBC or ODBC to access DB2 servers is in DB2 ODBC Guide and Reference. For handling errors, see DB2 Messages and Codes.

Information about writing applications across platforms can be found in Distributed Relational Database Architecture™: Application Programming Guide.

System and Database Administration: Administration covers almost everything else. DB2 Administration Guide divides those tasks among the following sections:

- Section 2 (Volume 1) of DB2 Administration Guide discusses the decisions that must be made when designing a database and tells how to bring the design into being by creating DB2 objects, loading data, and adjusting to changes.
- Section 3 (Volume 1) of DB2 Administration Guide describes ways of controlling access to the DB2 system and to data within DB2, to audit aspects of DB2 usage, and to answer other security and auditing concerns.
- Section 4 (Volume 1) of DB2 Administration Guide describes the steps in normal day-to-day operation and discusses the steps one should take to prepare for recovery in the event of some failure.
- Section 5 (Volume 2) of DB2 Administration Guide explains how to monitor the performance of the DB2 system and its parts. It also lists things that can be done to make some parts run faster.

In addition, the appendixes in DB2 Administration Guide contain valuable information on DB2 sample tables, National Language Support (NLS), writing exit routines, interpreting DB2 trace output, and character conversion for distributed data.

If you are involved with DB2 only to design the database, or plan operational procedures, you need DB2 Administration Guide. If you also want to carry out your own plans by creating DB2 objects, granting privileges, running utility jobs, and so on, then you also need:

- DB2 SQL Reference, which describes the SQL statements you use to create, alter, and drop objects and grant and revoke privileges
- DB2 Utility Guide and Reference, which explains how to run utilities
- DB2 Command Reference, which explains how to run commands

If you will be using data sharing, then you need DB2 Data Sharing: Planning and Administration, which describes how to plan for and implement data sharing.

Additional information about system and database administration can be found in DB2 Messages and Codes, which lists messages and codes issued by DB2, with explanations and suggested responses.

Diagnosis: Diagnosticians detect and describe errors in the DB2 program. They might also recommend or apply a remedy. The documentation for this task is in DB2 Diagnosis Guide and Reference and DB2 Messages and Codes.
How to obtain DB2 information

DB2 on the Web


You can view and search DB2 publications on the Web, or you can download and print many of the most current DB2 books. Follow links to other Web sites with more information about DB2 family and OS/390 solutions. Access DB2 on the Web at the following address:

http://www.ibm.com/software/db2os390

DB2 publications

The DB2 publications for DB2 Universal Database Server for OS/390 are available in both hardcopy and softcopy format.

BookManager® format

Use online books on CD-ROM or DVD, or the Web. You can read, search across books, print portions of the text, and make notes in these BookManager books. With the IBM Library Reader, you can view these books in the OS/390, VM, OS/2, DOS, AIX, and Windows™ environments. You can also view many of the DB2 BookManager books on the Web.

PDF format

Many of the DB2 books are available in Portable Document Format (PDF) for viewing or printing from CD-ROM, DVD, or the Web. Download the PDF books to your intranet for distribution throughout your enterprise.

CD-ROMs and DVD

Books for Version 6 of DB2 Universal Database Server for OS/390 are available on CD-ROMs and DVD:

- **DB2 UDB for OS/390 Version 6 Licensed Online Book**, LK3T-3519, containing **DB2 UDB for OS/390 Version 6 Diagnosis Guide and Reference** in BookManager format, for ordering with the product.

- **DB2 UDB Server for OS/390 Version 6 Online and PDF Library**, SK3T-3518, a collection of books for the DB2 server in BookManager and PDF formats.

Periodically, the books will be refreshed on subsequent editions of these CD-ROMs. The books for Version 6 of DB2 UDB Server for OS/390 are also available on the following collection kits that contain online books for many IBM products:

- **Online Library Omnibus Edition OS/390 Collection**, SK2T-6700, in English
- **z/OS Software Collection**, SK3T-4270,, in English
- **z/OS and Software Products DVD Collection**, SK3T–4271–00, in English
DB2 education

IBM Education and Training offers a wide variety of classroom courses to help you quickly and efficiently gain DB2 expertise. Classes are scheduled in cities all over the world. You can find class information, by country, at the IBM Learning Services Web site:

http://www.ibm.com/services/learning/

For more information, including the current local schedule, please contact your IBM representative.

Classes can also be taught at your location, at a time that suits your needs. Courses can even be customized to meet your exact requirements. The All-in-One Education and Training Catalog describes the DB2 curriculum in the United States. You can inquire about or enroll in these courses by calling 1-800-IBM-TEACH (1-800-426-8322).

How to order the DB2 library

You can order DB2 publications and CD-ROMs through your IBM representative or the IBM branch office serving your locality. If you are located within the United States or Canada, you can place your order by calling one of the toll-free numbers:

- In the U.S., call 1-800-879-2755.
- In Canada, call 1-800-565-1234.

To order additional copies of licensed publications, specify the SOFTWARE option. To order additional publications or CD-ROMs, specify the PUBLICATIONS and SLSS option. Be prepared to give your customer number, the product number, and the feature code(s) or order numbers you want.

Subscription through the Publication Notification System (PNS)

IBM has replaced the System Library Subscription Service (SLSS) with an up-to-date notification application, the Publication Notification System (PNS). IBM migrated all active SLSS subscriptions to the new PNS application, which you can access from the Web.

PNS users receive electronic notifications of updated publications in their profiles. You have the option of ordering the updates by using the publications direct ordering application or any other IBM publication ordering channel. Unlike SLSS, the PNS application does not send automatic shipments of publications. You will receive updated publications and a bill for them if you respond to the electronic notification. To access the PNS application on the World Wide Web, enter the following address on your Web browser command line:


Summary of changes to DB2 UDB for OS/390 Version 6

DB2 UDB for OS/390 Version 6 delivers an enhanced relational database server solution for OS/390. This release focuses on greater capacity, performance improvements for utilities and queries, easier database management, more powerful network computing, and DB2 family compatibility with rich new object-oriented capability, triggers, and more built-in functions.
## Capacity improvements

16-terabyte tables provide a significant increase to table capacity for partitioned and LOB table spaces and indexes, and for nonpartitioning indexes.

Buffer pools in data spaces provide virtual storage constraint relief for the ssnmDBM1 address space, and data spaces increase the maximum amount of virtual buffer pool space allowed.

## Performance and availability

**Improved partition rebalancing** lets you redistribute partitioned data with minimal impact to data availability. One REORG of a range of partitions both reorganizes and rebalances the partitions.

You can **change checkpoint frequency dynamically** using the new SET LOG command and initiate checkpoints any time while your subsystem remains available.

Utilities that are faster, more parallel, easier to use:

- Faster backup and recovery enables COPY and RECOVER to process a list of objects in parallel, and recover indexes and table spaces at the same time from image copies and the log.

- Parallel index build reduces the elapsed time of LOAD and REORG jobs of table spaces, or partitions of table spaces, that have more than one index; the elapsed time of REBUILD INDEX jobs is also reduced.

- Tests show **decreased elapsed and processor time for online REORG**.

- **Inline statistics** embeds statistics collection into utility jobs, making table spaces available sooner.

- You can **determine when to run REORG** by specifying threshold limits for relevant statistics from the DB2 catalog.

Query performance enhancements include:

- Query parallelism extensions for complex queries, such as outer joins and queries that use nonpartitioned tables

- **Improved workload balancing in a Parallel Sysplex** that reduces elapsed time for a single query that is split across active DB2 members

- **Improved data transfer** that lets you request multiple DRDA query blocks when performing high-volume operations

- The ability to use an **index to access predicates with noncorrelated IN subqueries**

- Faster query processing of queries that include join operations

More performance and availability enhancements include:

- Faster restart and recovery with the ability to postpone backout work during restart, and a faster log apply process

- **Increased flexibility with 8-KB and 16-KB page sizes** for balancing different workload requirements more efficiently, and for controlling traffic to the coupling facility for some workloads
• **Direct-row access** using the new ROWID data type to re-access a row directly without using the index or scanning the table

• **Ability to retain prior access path** when you rebind a statement. You almost always get the same or a better access path. For the exceptional cases, Version 6 of DB2 for OS/390 lets you retain the access path from a prior BIND by using rows in an Explain table as input to optimization.

• An **increased log output buffer size** (from 1000 4-KB to 100000 4-KB buffers) that improves log read and write performance

## Data sharing enhancements

- **More caching options** use the coupling facility to improve performance in a data sharing environment for some applications by writing changed pages directly to DASD.

- **Control of space map copy maintenance** with a new option avoids tracking of page changes, thereby optimizing performance of data sharing applications.

## User productivity

- **Predictive governing** capabilities enhance the resource limit facility to help evaluate resource consumption for queries that run against large volumes of data.

- **Statement cost estimation** of processing resource that is needed for an SQL statement helps you to determine error and warning thresholds for governing, and to decide which statements need tuning.

- A **default buffer pool** for user data and indexes isolates user data from the DB2 catalog and directory, and separating user data from system data helps you make better tuning decisions.

- **More information available for monitoring DB2** includes data set I/O activity in traces, both for batch reporting and online monitors.

- **Better integration of DB2 and Workload Manager delay reporting** enables DB2 to notify Workload Manager about the current state of a work request.

- **More tables are allowed in SQL statements** SELECT, UPDATE, INSERT, and DELETE, and in views. DB2 increases the limit from 15 to 225 tables. The number of tables and views in a subselect is not changed.

- **Improved DB2 UDB family compatibility** includes SQL extensions, such as:
  - A VALUES clause of INSERT that supports any expression
  - A new VALUES INTO statement

- **Easier recovery management** lets you achieve a single point of recovery and recover data at a remote site more easily.

- **Enhanced database commands** extend support for pattern-matching characters (*) and let you filter display output.

  You can easily **process dynamic SQL in batch mode** with the new object form of DSNTEP2 shipped with DB2 for OS/390.
Network computing

SQLJ, the newest Java implementation for the OS/390 environment, supports SQL embedded in the Java programming language. With SQLJ, your Java programs benefit from the superior performance, manageability, and authorization available to static SQL, and they are easy to write.

DRDA® support for three-part names offers more functionality to applications using three-part names for remote access and improves the performance of client/server applications.

Stored procedure enhancements include the ability to create and modify stored procedure definitions, make nested calls for stored procedures and user-defined functions, and imbed CALL statements in application programs or dynamically invoke CALL statements from IBM's ODBC and CLI drivers.

DB2 ODBC extensions include new and modified APIs and new data types to support the object-relational extensions.

ODBC access to DB2 for OS/390 catalog data improves the performance of your ODBC catalog queries by redirecting them to shadow copies of DB2 catalog tables.

Better performance for ODBC applications reduces the number of network messages that are exchanged when an application executes dynamic SQL.

Improvements for dynamically prepared SQL statements include a new special register that you use to implicitly qualify names of distinct types, user-defined functions, and stored procedures.

DDF connection pooling uses a new type of inactive thread that improves performance for large volumes of inbound DDF connections.

Object-relational extensions and active data

The object extensions of DB2 offer the benefits of object-oriented technology while increasing the strength of your relational database with an enriched set of data types and functions. Complementing these extensions is a powerful mechanism, triggers, that brings application logic into the database that governs the following new structures:

- **Large objects (LOBs)** are well suited to represent large, complex structures in DB2 tables. Now you can make effective use of multimedia by storing objects such as complex documents, videos, images, and voice. Some key elements of LOB support include:
  - LOB data types for storing byte strings up to 2 GB in size
  - LOB locators for easily manipulating LOB values in manageable pieces
  - Auxiliary tables (that reside in LOB table spaces) for storing LOB values

- **Distinct types** (which are sometimes called user-defined data types), like built-in data types, describe the data that is stored in columns of tables where the instances (or objects) of these data types are stored. They ensure that only those functions and operators that are explicitly defined on a distinct type can be applied to its instances.

- **User-defined functions**, like built-in functions or operators, support manipulation of distinct type instances (and built-in data types) in SQL queries.
• **New and extended built-in functions** improve the power of the SQL language with about 100 new built-in functions, extensions to existing functions, and sample user-defined functions.

**Triggers** automatically execute a set of SQL statements whenever a specified event occurs. These statements validate and edit database changes, read and modify the database, and invoke functions that perform operations inside and outside the database.

You can use the **DB2 Extenders** feature of DB2 for OS/390 to store and manipulate image, audio, video, and text objects. The extenders automatically capture and maintain object information and provide a rich body of APIs.

**More function**

Some function and capability is available to both Version 6 and Version 5 users. Learn how to obtain these functions now, prior to migrating to Version 6, by visiting the following Web site:

http://www.software.ibm.com/data/db2/os390/v5apar.html

**Features of DB2 for OS/390**

DB2 for OS/390 Version 6 offers a number of tools, which are optional features of the server, that are shipped to you automatically when you order DB2 Universal Database for OS/390:

- **DB2 Management Tools Package**, which includes the following elements:
  - DB2 UDB Control Center
  - DB2 Stored Procedures Builder
  - DB2 Installer
  - DB2 Visual Explain
  - DB2 Estimator
- **Net.Data® for OS/390**

You can install and use these features in a “Try and Buy” program for up to 90 days without paying license charges:

- Query Management Facility
- DB2 DataPropagator™
- DB2 Performance Monitor
- DB2 Buffer Pool Tool
- DB2 Administration Tool

**Migration considerations**

Migration to Version 6 eliminates all type 1 indexes, shared read-only data, data set passwords, use of host variables without the colon, and RECOVER INDEX usage. You can migrate to Version 6 only from a Version 5 subsystem.
Summary of changes to this book

This edition adds and modifies messages and codes to support DB2 Version 6. It also incorporates technical corrections and changes made to previously published information. For specific information about new, changed and deleted messages and codes for Version 6, see Appendix D, “New, Changed, and Deleted Messages and Codes” on page 1073.
SQL Return Codes

The information in this chapter is General-use Programming Interface and Associated Guidance Information, as defined in Appendix E, "Notices" on page 1081.

Introduction

Structured Query Language (SQL) return codes, and the tokens referred to in the explanations, are returned in the SQL communication area (SQLCA).

The SQLCA is an area in the application program (defined by the application program) for the use of DB2. It is described in Appendix C of DB2 SQL Reference.

The SQL return code is returned in the SQLCODE field of the SQLCA. The tokens are returned in the SQLERRM field. If there are several tokens, they appear sequentially in SQLERRM in the order in which they appear in the message text. The tokens are separated by the character X'FF'.

A token appears in the message text in lowercase letters. When an SQL return code is returned through SPUFI, the tokens have been substituted into the message text and the text is displayed. The substitution of tokens into message text is performed by a DB2 module named DSNTIAR. This module can also be used by application programs. Refer to Section 3 of DB2 Application Programming and SQL Guide for more information about DSNTIAR.

Checking the execution of SQL statements

An application program containing executable SQL statements must either provide a structure named SQLCA or a stand-alone integer variable named SQLCODE (SQLCOD in FORTRAN). An SQLCA may be provided by using the INCLUDE SQLCA statement. INCLUDE SQLCA must not be used if a stand-alone SQLCODE is provided.

The SQLCA includes an integer variable named SQLCODE. The option of providing a stand-alone SQLCODE instead of an SQLCA allows for conformance with the ISO/ANSI SQL standard. The use of this option must be indicated to the pre-compiler.

SQLCODE

Regardless of whether the application program provides an SQLCA or a stand-alone variable, SQLCODE is set by DB2 after each SQL statement is executed. DB2 conforms to the ISO/ANSI SQL standard as follows:

- If SQLCODE = 0, execution was successful.
- If SQLCODE > 0, execution was successful with a warning.
- If SQLCODE < 0, execution was not successful.
- SQLCODE = 100, "no data" was found. For example, a FETCH statement returned no data because the cursor was positioned after the last row of the result table.

SQLSTATE

SQLSTATE is also set by DB2 after the execution of each SQL statement. Thus, application programs can check the execution of SQL statements by testing SQLSTATE instead of SQLCODE. SQLSTATE (SQLSTT in FORTRAN) is a 5-byte character string variable in the SQLCA.

SQLSTATE provides application programs with common codes for common error conditions (the values of SQLSTATE are product-specific only if the error or warning is product-specific). Furthermore, SQLSTATE is designed so that application programs can test for specific errors or classes of errors. The coding scheme is the same for all IBM relational database products. See Appendix C, "SQLSTATE Values—Common Error Codes" on page 1059 for more information and a complete list of the possible values of SQLSTATE.
Successful execution SQL code

000 SUCCESSFUL EXECUTION

Explanation: Unqualified successful execution or successful execution with one or more warnings. If SQLWARN0 is blank, there are no warnings. If SQLWARN0 = W, at least one of the other warning indicators in the SQLCA has been set to indicate a warning condition. For example, SQLWARN1 is used to indicate that a value of a string column was truncated when assigned to a host variable. SQLWARNX fields are described in Appendix C of DB2 SQL Reference.

Destination: 00000 for unqualified successful execution
Destination: 01ddd for successful execution with warning 'ddd'.

+012 THE UNQUALIFIED COLUMN NAME column-name WAS INTERPRETED AS A CORRELATED REFERENCE

Explanation: The column name does not identify a column of a table or view in the FROM clause of the subquery. However, it does identify a column of a table or view in a FROM clause at a higher level in the statement.

System Action: The column name is interpreted as a correlated reference.

Programmer Response: If DB2's interpretation of the column name was not what you intended, rewrite the SQL statement and submit it again. If you intend the column name to refer to a table named at a higher level, we advise rewriting the statement anyway, using a table name or correlation name as a qualifier for the column name. The unqualified column name could be interpreted differently if you do a rebind after altering one of the tables to which you refer.

Destination: 01545

+098 A DYNAMIC SQL STATEMENT ENDS WITH A SEMICOLON.

Explanation: The statement string of a PREPARE or EXECUTE IMMEDIATE statement is a valid dynamic SQL statement, but it ends with a semicolon.

System Action: The semicolon and any subsequent text are ignored.

Programmer Response: Check that the semicolon is being used as a statement terminator.

Destination: 01568

+100 ROW NOT FOUND FOR FETCH, UPDATE OR DELETE, OR THE RESULT OF A QUERY IS AN EMPTY TABLE

Explanation: One of the following conditions occurred:

- The result of the subselect of an INSERT statement is empty.

When a SELECT statement is executed using SPUFI, this SQLCODE indicates normal completion.

System Action: No data was retrieved, updated, or deleted.

Destination: 02000

+110 SQL UPDATE TO A DATA CAPTURE TABLE NOT SigNEALED TO ORIGINATING SUBSYS-TEM

Explanation: DataPropagator (DPropNR) exit routine issued an SQL INSERT, UPDATE, or DELETE statement to a table defined with DATA CAPTURE CHANGES. Since data capture is already in progress, notification is not sent back to the originating IMS subsystem.

System Action: DB2 changes the data and records the change in the log. DB2 does not notify DPropNR's exit routine of the change, because doing so might cause the same change to be made again.

Destination: 01561

+111 THE SUBPAGES OPTION IS NOT SUPPORTED FOR TYPE 2 INDEXES

Explanation: You cannot use the SUBPAGES option for type 2 indexes.

System Action: The option is ignored and processing continues.

Programmer Response: Remove the SUBPAGES option to get rid of the warning.

Destination: 01590

+117 THE NUMBER OF INSERT VALUES IS NOT THE SAME AS THE NUMBER OF OBJECT COLUMNS

Explanation: The number of insert values in the value list of the INSERT statement is not the same as the number of object columns specified.

System Action: A valid plan or package will be created if no errors are detected. The statement is bound dynamically on each execution of the statement.

Programmer Response: For better performance, rebind the plan or package after correcting the statement. To correct the statement, specify one and only one value for each of the specified object columns.

Destination: 01525

+162 TABLESPACE database-name.tablespace-name HAS BEEN PLACED IN CHECK PENDING

Explanation: The indicated table space is in check pending status because the ALTER TABLE statement was used to specify a referential constraint or a check constraint (while special register CURRENT RULES = 'DB2') on a populated table. The table space is not generally available until the check pending status is removed from the table space.

System Action: The table space was placed in check pending status.
Programmer Response: Run the CHECK DATA utility. The enforcement of the referential constraint or the check constraint is deferred until the CHECK DATA utility is run.

Destination: 01514

+203 THE QUALIFIED COLUMN NAME column-name WAS RESOLVED USING A NON-UNIQUE OR UNEXPOSED NAME

Explanation: The table designator selected to resolve a qualified column name is one of the following:
- An unexposed name
- An exposed name that has an exposed duplicate in the same FROM clause
- An exposed name that has an unexposed duplicate which appears before the selected name in the ordered list of names to which the qualifier is compared

Therefore, the statement does not conform to the guidelines for using only unique exposed names as qualifiers or it is possible that the column reference was not resolved to the intended instance of the table or view.

System Action: DB2 uses the selected name to resolve the reference.

Programmer Response: If DB2’s resolution of the qualifier was not what you intended, rewrite the SQL statement and submit it again. The rules used to resolve column name qualifiers are given in Chapter 3 of DB2 SQL Reference.

Destination: 01552

+204 name IS AN UNDEFINED NAME

Explanation: The object identified by ‘name’ is not defined in the DB2 subsystem. This return code can be generated for any type of DB2 object.

System Action: A valid plan or package will be created if no errors are detected. The statement is bound dynamically on each execution of the statement.

Programmer Response: For better performance, rebind the plan or package after correcting the statement. To correct the statement, determine that the object name was correctly specified in the SQL statement (including any required qualifiers). If so, ensure that the object exists in the system before resubmitting the statement.

Destination: 01532

+206 column-name IS NOT A COLUMN OF AN INSERTED TABLE, UPDATED TABLE, OR ANY TABLE IDENTIFIED IN A FROM CLAUSE

Explanation: This return code is used to report one of these errors:
- In the case of an INSERT or UPDATE statement, the specified column is not a column of the table or view that was specified as the object of the insert or update.
- In the case a SELECT or DELETE statement, the specified column is not a column of any of the tables or views identified in a FROM clause in the statement.
- There is a correlated reference in GROUP BY.
- There is an unresolved qualified reference in HAVING.

System Action: A valid plan or package will be created if no errors are detected. The statement is bound dynamically on each execution of the statement.

Programmer Response: For better performance, rebind the plan or package after correcting the statement. To correct the statement, verify that the column and table names are specified correctly in the SQL statement. In the case of a SELECT statement, check to be sure that all of the required tables were named in the FROM clause.

Destination: 01533

+218 THE SQL STATEMENT REFERENCING A REMOTE OBJECT CANNOT BE EXPLAINED

Explanation: The user has used EXPLAIN(YES) on the bind subcommand to bind an application which has SQL statement referencing a remote object or the user has a static EXPLAIN SQL statement which references a remote object in the application program. EXPLAIN on a remote object is not supported by DB2.

It is issued at BIND time, and only with VALIDATE(RUN).

System Action: The plan or package will be bound successfully, but no information will be filled in the user’s PLAN-TABLE for the SQL statement referencing a remote object. An SQLCODE -512 will be issued at run time if the EXPLAIN statement is found to explain a remote object.

Destination: 01537

+219 THE REQUIRED EXPLANATION TABLE table-name DOES NOT EXIST

Explanation: The EXPLAIN statement assumes the existence of the explanation table and it is not defined in the DB2 subsystem as a base table. Refer to Chapter 6 of DB2 SQL Reference for more information.

System Action: A valid plan or package will be created if no errors are detected. The statement is bound dynamically on each execution of the statement.

Programmer Response: For better performance, rebind the plan or package after correcting the statement. To correct the statement, determine whether the required explanation table does exist. If not, create the required table.

Destination: 01532

+220 THE COLUMN column-name IN EXPLANATION TABLE table-name IS NOT DEFINED PROPERLY

Explanation: An error occurred during the insertion of a row into the explanation table. The table is improperly defined for the following reasons:
- A column is missing.
- Columns are defined in the wrong order.
- The table contains an extra column.
- A column description is invalid because of its name, data type, length, or null attributes.

System Action: A valid plan or package will be created if no errors are detected. The statement is bound dynamically on each execution of the statement.

Programmer Response: For better performance, rebind the plan or package after correcting the statement. To correct the
statement, correct the definition of the required explanation table. Refer to Chapter 6 of DB2 SQL Reference for information about defining an explanation table.

| Destination: 01546 |

+236 SQLDA INCLUDES integer1 SQLVAR ENTRIES, BUT integer2 ARE REQUIRED FOR integer3 COLUMNS

Explanation: The value of the SQLN field of the SOLDA should be at least as large as the number of columns being described. integer3 is the number of columns being described.

In the case that USING BOTH has been specified, twice as many SQLVAR entries are needed as the number of columns being described.

The number of SQLVAR entries that are needed to return all of the information about the columns is integer2.

Note: in the case of DESCRIBE INPUT, each reference to column would actually be parameter.

System Action: The SQLDAID 7th byte has been set to "on" with a value of 2 indicating that 2 SQLVAR entries are needed for each column. DB2 has not set any SQLVAR entries.

Programmer Response: Increase the value of the SQLN field in the SQLDA to the value indicated in the message (making sure the SQLDA is large enough to support that amount) and resubmit the statement.

Destination: 01005

+237 SQLDA INCLUDES integer1 SQLVAR ENTRIES, BUT integer2 ARE REQUIRED BECAUSE AT LEAST ONE OF THE COLUMNS BEING DESCRIBED IS A DISTINCT TYPE

Explanation: Given that at least one of the columns being described is a distinct type, space should be provided for the extended SQLVAR entries in addition to the base SQLVAR entries. The value of SQLN, integer1, indicates that there are not enough SQLVAR entries for the base and extended SQLVAR entries.

The total number of SQLVAR entries that are required depends on whether USING BOTH was specified or not (n is the number of columns being described):

- With USING BOTH, space should be allocated for 3n SQLVAR entries.
- Otherwise, space should be allocated for 2n SQLVAR entries.

The number of SQLVAR entries that are needed to return all of the information about the columns is integer2.

Note: in the case of DESCRIBE INPUT, each reference to column would actually be parameter.

System Action: DB2 has set the SQLDAID 7th byte flag "on" because sufficient space was not provided for the extended SQLVAR entries. The value of the 7th byte flag indicates how many SQLVAR entries are needed for each column. DB2 has not set any SQLVAR entries.

Programmer Response: Increase the value of the SQLN field in the SQLDA to integer2 (after making sure that the SQLDA is large enough to support that amount) and resubmit the statement.

Destination: 01005

+239 SQLDA INCLUDES integer1 SQLVAR ENTRIES, BUT integer2 ARE REQUIRED FOR integer3 COLUMNS BECAUSE AT LEAST ONE OF THE COLUMNS BEING DESCRIBED IS A DISTINCT TYPE

Explanation: Given that at least one of the columns being described is a distinct type, space should be provided for the extended SQLVAR entries in addition to the base SQLVAR entries. The value of SQLN, integer1, indicates that there are not enough SQLVAR entries for the base and extended SQLVAR entries.

The total number of SQLVAR entries that are required depends on whether USING BOTH was specified or not (n is the number of columns being described which is integer3),

- With USING BOTH, space should be allocated for 3n SQLVAR entries.

unless USING BOTH was specified (in which case additional SQLVAR entries must be provided for the labels).

If the distinct type information is needed, the value of the SQLN field in the SOLDA should be increased to integer2 (after making sure that the SQLDA is large enough to support that amount) and the statement should be resubmitted.

Destination: 01594
• Otherwise, space should be allocated for 2n SQLVAR entries.

The number of SQLVAR entries that are needed to return all of the information about the columns is integer2.

Note: in the case of DESCRIBE INPUT, each reference to column would actually be parameter.

System Action: DB2 has set the SQLDAID 7th byte flag "on" because sufficient space was not provided for the extended SQLVAR entries. The value of the 7th byte flag indicates how many SQLVAR entries are needed for each column. DB2 has not set any SQLVAR entries. :eq.

Programmer Response: If the distinct type information is needed, the value of the SQLN field in the SQLDA should be increased to integer2 (after making sure the SQLDA is large enough to support that amount) and the statement should be resubmitted.

If there is no need for the additional information about the distinct type(s) in the result set, then it is possible to resubmit the statement only providing enough SQLVAR entries to accommodate the number of columns being described (i.e. provide the necessary number of base SQL entries).

Destination: 01005

+304 A VALUE WITH DATA TYPE data-type1 CANNOT BE ASSIGNED TO A HOST VARIABLE BECAUSE THE VALUE IS NOT WITHIN THE RANGE OF THE HOST VARIABLE IN POSITION position-number WITH DATA TYPE data-type2

Explanation: A FETCH or SELECT into a host variable list or structure, position number 'position-number' failed because the host variable having data type 'data-type2' was not large enough to hold the retrieved value having data type 'data-type1'.

System Action: The FETCH or SELECT could not return the data for the indicated SELECT item, the indicator variable is set to negative two (-2) to indicate a null value returned. Processing continues.

Programmer Response: Verify that table definitions are current, and that the host variable has the proper data type. See the explanation for SQLCODE -405 for ranges of SQL data types.

Destination: 01515

+339 THE SQL STATEMENT HAS BEEN SUCCESSFULLY EXECUTED, BUT THERE MAY BE SOME CHARACTER CONVERSION INCONSISTENCIES

Explanation: The application is connected to a DB2 Version 2 Release 3 database server. The SQL statement is using an alias or three-part name, which refers to another DB2 subsystem that is at the Version 2 Release 2 level. DB2 Version 2 Release 2 does not support character conversion. Since the execution of SQL statements from an EBCDIC DRDA requester to an EBCDIC Version 2 Release 2 DB2 server could require character conversion, a warning is generated. If the requester system CCSID is inconsistent with the DB2 Version 2 Release 2 environment, most EBCDIC character code points match to the same character. Only certain special characters typically lead to data integrity concerns. Therefore, a warning is generated.

System Action: The statement is successfully executed.

Programmer Response: If the DB2 Version 2 Release 2 table is accessed from other environments (different CCSID), incorrect results might occur (relative to what the other environment might expect). You should understand what characters might not be consistent with the DB2 Version 2 Release 2 environment (its inherent CCSID) and avoid use of those characters or understand the exposure you face if you use them.

System Programmer Response: If the application must refer to the Version 2 Release 2 subsystem data, the Version 2 Release 2 DB2 subsystem can be migrated to Version 2 Release 3 where character conversion is supported.

Destination: 01569

+394 USER SPECIFIED OPTIMIZATION HINTS USED DURING ACCESS PATH SELECTION

Explanation: Normal access path selection was bypassed in favor of an access path specified in the PLAN_TABLE.

System Action: Processing continues normally.

Programmer Response: Ensure that the access path is correct and produces the correct results.

Destination: 01629

+395 USER SPECIFIED OPTIMIZATION HINTS ARE INVALID (REASON CODE = reason-code). THE OPTIMIZATION HINTS ARE IGNORED.

Explanation: The optimization hints specified for this query are invalid. A reason-code in the following table can help identify why the hints were invalid:

<table>
<thead>
<tr>
<th>reason-code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Outer join not supported.</td>
</tr>
<tr>
<td>2</td>
<td>TABNO is invalid.</td>
</tr>
<tr>
<td>3</td>
<td>TNAME is invalid.</td>
</tr>
<tr>
<td>4</td>
<td>TNAME is ambiguous.</td>
</tr>
<tr>
<td>5</td>
<td>TABNO doesn't agree with TNAME.</td>
</tr>
<tr>
<td>6</td>
<td>QBLOCKNO doesn't agree with TNAME.</td>
</tr>
<tr>
<td>7</td>
<td>PAGE_RANGE is invalid.</td>
</tr>
<tr>
<td>8</td>
<td>PREFETCH is invalid.</td>
</tr>
<tr>
<td>Method</td>
<td>Code</td>
</tr>
<tr>
<td>--------</td>
<td>------</td>
</tr>
<tr>
<td>METHOD is invalid.</td>
<td>9</td>
</tr>
<tr>
<td>SORTN_JOIN is invalid.</td>
<td>10</td>
</tr>
<tr>
<td>SORTC_JOIN is invalid.</td>
<td>11</td>
</tr>
<tr>
<td>ACCESSTYPE is invalid.</td>
<td>12</td>
</tr>
<tr>
<td>ACCESSCREATOR or ACCESSNAME is invalid.</td>
<td>13</td>
</tr>
<tr>
<td>TYPE 1 index can't be used with isolation level 'UR'.</td>
<td>14</td>
</tr>
<tr>
<td>Specified index can't be used as requested.</td>
<td>15</td>
</tr>
<tr>
<td>Multi-index access can't be done.</td>
<td>16</td>
</tr>
<tr>
<td>Invalid ACCESSTYPE combination.</td>
<td>17</td>
</tr>
<tr>
<td>METHOD specified for first table accessed.</td>
<td>18</td>
</tr>
<tr>
<td>Nested-loop join can't be done as requested.</td>
<td>19</td>
</tr>
<tr>
<td>Merge join can't be done as requested.</td>
<td>20</td>
</tr>
<tr>
<td>Hybrid join can't be done as requested.</td>
<td>21</td>
</tr>
<tr>
<td>PARALLELISM_MODE requested can't be done.</td>
<td>22</td>
</tr>
<tr>
<td>PARALLELISM_MODE is invalid.</td>
<td>23</td>
</tr>
<tr>
<td>ACCESS_DEGREE is invalid.</td>
<td>24</td>
</tr>
<tr>
<td>JOIN_DEGREE is invalid.</td>
<td>25</td>
</tr>
<tr>
<td>A table is missing.</td>
<td>26</td>
</tr>
<tr>
<td>A table is redundant.</td>
<td>27</td>
</tr>
<tr>
<td>PRIMARY_ACCESSSTYPE is invalid.</td>
<td>28</td>
</tr>
<tr>
<td>ACCESS_PGROUP_ID is not specified.</td>
<td>29</td>
</tr>
<tr>
<td>JOIN_PGROUP_ID is not specified.</td>
<td>30</td>
</tr>
<tr>
<td>PARALLELISM_MODE is not specified.</td>
<td>31</td>
</tr>
<tr>
<td>CREATOR or TNAME is invalid.</td>
<td>32</td>
</tr>
<tr>
<td>Join sequence is incorrect.</td>
<td>33</td>
</tr>
<tr>
<td>Full outer join requires merge join method.</td>
<td>34</td>
</tr>
<tr>
<td>WHEN_OPTIMIZE is invalid or inconsistent.</td>
<td>35</td>
</tr>
<tr>
<td>Unexpected error.</td>
<td>99</td>
</tr>
</tbody>
</table>

**System Action:** The user-specified optimization hints are ignored. The access path is determined without the use of hints and processing continues normally.

**Programmer Response:** Correct the problem with the optimization hints, or disable their use for this query.

**Destination:** 01628

---

### Location Location Is Unknown

**Explanation:** A remote object is referenced and either the table SYSIBM.Locations is not defined or the referenced 'location' matches no entry in the SYSIBM.Locations.LOCATION column.

**System Action:** For the CREATE ALIAS statement, the alias is created. For binding a plan or package with the VALIDATE(RUN) option, the plan or package is created.

**Destination:** 01521

---

### Local Object Referenced by the Create Alias Statement Does Not Exist

**Explanation:** The local object referenced by the CREATE ALIAS statement does not exist when creating the alias.

**System Action:** The alias is created.

**Destination:** 01522

---

### Option Keyword Is A Deprecated Feature

**Explanation:** Keyword is a deprecated feature that will not be supported in releases following DB2 Version 6. It is accepted, but continued use of this keyword is not recommended.

For indexes, use type 2 indexes rather than type 1 indexes to avoid any incompatibilities.

**System Action:** Processing continues normally.

**Programmer Response:** No change is required for the current release. However, you should change your SQL statement and remove this feature to prepare for future releases when this feature is not supported.

**Destination:** 01608

---

### Value Value Has Been Truncated

**Explanation:** The value value was truncated by a cast function, which was called to transform the value in some way. This is a warning situation. The cast function is a result of:

- a CAST specification
- a built-in function such as CHAR, VARCHAR, etc.
- a CAST FROM specification on the CREATE FUNCTION statement that created the function
- a user-defined function that is sourced on another function and the result needed to be transformed.

If 'value' has the 'for bit data' subtype, then the 'value' is printed as a hexadecimal string in quotes followed by an X.

**System Action:** The value has been truncated.

**Programmer Response:** Ensure that the output is as expected and that the truncation has not caused any unexpected consequences.

**Destination:** 01004

---

### External Function or Procedure Name (Specific Name Specific-Name) Has Returned A Warning SQLSTATE, With Diagnostic Text Text

**Explanation:** An SQLSTATE of the form 01Hxx was returned to DB2 by user-defined function or procedure name, along with message text text.

**System Action:** Processing continues.

**Programmer Response:** See your database administrator, or the author of the function or procedure to find out the meaning of the warning. The significance of the bad SQLSTATE to the invoking application can be learned from the author of the function or procedure.

**Destination:** 01Hxx
**RESOURCE LIMIT WARNING THRESHOLD OF CATEGORY**

**Explanation:**
The stored procedure named by proc completed normally. However, the stored procedure exceeded the defined limit on the number of query result sets that the procedure can return.

- `num` identifies the number of query result sets returned by the stored procedure.
- `integer` identifies the defined limit on the number of query result sets for the stored procedure.

Only the first `integer` query result sets are returned to the SQL program that issued the SQL CALL statement.

The possible causes are as follows:

- The stored procedure is unable to return `num` result sets due to the limit defined for the procedure.
- The stored procedure is unable to return `num` result sets due to the DRDA limitations imposed by the client. The DRDA client establishes this limit with the MAXRSLCNT DDM code point.

**System Action:** The SQL statement is successful. The SQLWARN9 field is set to 'Z'.

**Destination:** 0100E

---

**CREATE PROCEDURE proc RETURNED num QUERY RESULTS SETS**

**Explanation:**
The stored procedure named by proc completed normally. The procedure returned the number of SQL query result sets specified in `num`.

**System Action:** The SQL statement is successful. The SQLWARN9 field is set to 'Z'.

**Destination:** 0100C

---

**NUMBER OF RESULT SETS IS GREATER THAN NUMBER OF LOCATORS**

**Explanation:**
The number of result set locators specified on the ASSOCIATE LOCATORS statement is less than the number of result sets returned by the stored procedure. The first "n" result set locator values are returned, where "n" is the number of result set locator variables specified on the SQL statement.

**System Action:** The SQL statement is successful. The SQLWARN3 field is set to 'Z'.

**Programmer Response:** Increase the number of result set locator variables specified on the SQL statement.

**Destination:** 01614

---

**THE RESULT OF THE POSITIONED UPDATE OR DELETE MAY DEPEND ON THE ORDER OF THE ROWS**

**Explanation:**
A positioned update of a primary key or a delete from a table with a self-referencing constraint was requested.

**System Action:** DB2 executes the UPDATE or DELETE statement and the contents of the table are changed.

**Destination:** 01591

---

**THE REFERENTIAL OR UNIQUE CONSTRAINT name HAS BEEN IGNORED BECAUSE IT IS A DUPLICATE**

**Explanation:**
A FOREIGN KEY clause uses the same key and parent table as another FOREIGN KEY clause, or a UNIQUE clause uses the same column list as another UNIQUE clause. In either case, the duplicate clause is ignored. `name` is either the foreign key name or the name of the first column in the constraint that is ignored.

**System Action:** DB2 continues processing.
Programmer Response: If the duplication is an error, correct the statement and execute it again.

Destination: 01543

+551 auth-id DOES NOT HAVE THE PRIVILEGE TO PERFORM OPERATION operation on object-name

Explanation: Authorization ID ‘auth-id’ has attempted to perform the specified ‘operation’ on object ‘object-name’ without having been granted the proper authority to do so. This error might also occur if the specified object does not exist, if the object is a read-only view (for UPDATE or INSERT), or if ‘auth-id’ is trying to create a table or view with an authorization ID other than its own. Only if your authorization ID is SYSADM, DBADM, or DBCTRL can you create a table or view from an ‘auth-id’ other than your own.

If this error occurs while DB2 is creating or altering a table involving referential constraints, this code reports that the user does not have the necessary ALTER privilege to perform a FOREIGN KEY, DROP FOREIGN KEY, or DROP PRIMARY KEY operation. The ‘object-name’ identifies the object table of the CREATE or ALTER TABLE statement, not the table for which the user lacks the ALTER privilege.

System Action: A valid plan or package will be created if no errors are detected. The statement is bound dynamically on each execution of the statement.

Programmer Response: For better performance, rebind the plan or package after correcting the statement. To correct the statement, ensure that ‘auth-id’ has been granted the authority to perform the desired operation, that ‘object-name’ exists, and that ‘auth-id’ is not trying to create a table with a different authorization ID.

Destination: 01548

+552 auth-id DOES NOT HAVE THE PRIVILEGE TO PERFORM OPERATION operation

Explanation: Authorization ID ‘auth-id’ has attempted to perform the specified ‘operation’ without having been granted the authority to do so.

System Action: A valid plan or package will be created if no errors are detected. The statement is bound dynamically on each execution of the statement.

Programmer Response: For better performance, rebind the plan or package after correcting the statement. To correct the statement, ensure that the authorization-ID has been granted the authority necessary to perform the desired operation.

Destination: 01542

+558 THE WITH GRANT OPTION IS IGNORED

Explanation: The GRANT statement contained one of the following situations:

- PUBLIC was within the list of ‘grantee’ authorization IDs.
- BINDAGENT privilege was being granted.
- ANY package privilege on collection-id.* was being granted.

The WITH GRANT option may not be used in the above situations.

System Action: The offending privilege(s) in the authorization specification are granted without the GRANT option. If the grantee is PUBLIC, all the privileges in the authorization specification are granted without the GRANT option.

Destination: 01516

+561 THE ALTER, INDEX, REFERENCES, AND TRIGGER PRIVILEGES CANNOT BE GRANTED PUBLIC AT ALL LOCATIONS

Explanation: You specified a GRANT statement with either an ALL or ALL PRIVILEGES keyword. ALL and ALL PRIVILEGES imply the granting of ALTER, INDEX, REFERENCES, AND TRIGGER privileges that cannot be granted to a remote user.

System Action: DB2 executes the GRANT statement. However, it does not grant the ALTER, INDEX, REFERENCES, or TRIGGER privileges to PUBLIC*.

Destination: 01523

+562 A GRANT OF A PRIVILEGE WAS IGNORED BECAUSE THE GRANTEE ALREADY HAS THE PRIVILEGE FROM THE GRANTOR

Explanation: At least one of the privileges in the GRANT statement was ignored because the privilege was already granted to the grantee by the grantor.

System Action: The privileges previously granted are ignored; all others are granted.

Destination: 01560

+585 THE SCHEMA NAME schema-name APPEARS MORE THAN ONCE IN THE CURRENT PATH

Explanation: The current path includes schema name more than once.

System Action: The statement is executed.

Destination: 01625

+599 COMPARISON FUNCTIONS ARE NOT CREATED FOR A DISTINCT TYPE BASED ON A LONG STRING DATA TYPE

Explanation: Comparison functions are not created for a distinct type based on a long string data type (BLOB, CLOB, DBCLOB) since the corresponding function are not available for these built-in data types.

System Action: The statement is processed successfully.

Programmer Response: No action is required.

Destination: 01596

+610 A CREATE/ALTER ON OBJECT object-name HAS PLACED OBJECT IN utility pending

Explanation: The identified object is in one of the following states:

- REBUILD pending for an index
  The index is in REBUILD PENDING status because CREATE INDEX with DEFER was specified on a populated table. The index is not generally available until the index is removed from the REBUILD pending state.
- REORG pending for a table space partition
  The table space is in REORG pending because ALTER INDEX was used to change the limit key values. The table
space partition is not generally available until the REORG pending status is removed.

- REORG pending for a table space
- The table space is in REORG pending because ALTER TABLE was used to add an identity column to a populated table. The table space is not generally available until the REORG pending status is removed.

**System Action:** The object was placed in the indicated pending status.

**Programmer Response:** The following actions may be taken:

- For REBUILD pending on an index, use the REBUILD INDEX utility to rebuild the index and remove the REBUILD pending status.
- For REORG pending on a table space partition, perform the following steps:
  1. Issue a DISPLAY DATABASE command for the table space to identify which partitions are in REORG pending.
  2. Run the REORG utility on the partitions that are in REORG pending.
- For REORG pending on a table space, run the REORG utility on the table space.

**Destination:** 01566

---

**Explanation:** This warning code is used to report that the definition of the indicated table is incomplete because DROP INDEX was used to drop its primary index. The table is not generally available until a new primary index is created.

**System Action:** The definition of the table is marked as incomplete. Subsequent SQL references to the table, except to grant or revoke privileges on it, will cause SQLCODE -540 to be returned. Attempts to run already bound plans referencing the table will result in SQLCODE -904 or -923 with resource unavailable reason code 00C9009F. CHECK and LOAD utilities involving the table are not allowed. If they are used, you will receive message DSNJ305I or DSNJ500I with reason code 00C9009F. Utilities other than CHECK and LOAD are allowed.

**Programmer Response:** Recreate the primary index using CREATE INDEX. This will remove the table from INCOMPLETE DEFINITION status.

**Note:** The reason that a primary index may need to be dropped and recreated is to change the STOGROUP or SUBPAGES parameters of the index.

**Destination:** 01518

---

**Explanation:** The index was created to enforce the uniqueness of a key that was defined when the table was created. Dropping the index terminates enforcement of the unique constraint by DB2.

**System Action:** The index is dropped.

**Programmer Response:** If the unique constraint is still intended to apply, create a new unique index with the same key as the dropped index.

**Destination:** 01529

---

**Explanation:** The WHERE NOT NULL clause is ignored on the CREATE INDEX statement because the index key is defined on columns that cannot contain null values.

**System Action:** The option is ignored; processing continues.

**Programmer Response:** Remove the WHERE NOT NULL clause to get rid of the warning.

**Destination:** 01528

---

**Explanation:** This table is defined with the maximum number of columns. It cannot be altered to be a dependent table later.

**System Action:** The table is created. Check to see if the table will become a dependent table at a later time. If yes, drop and recreate the table with fewer than 750 columns.

**Destination:** 01538

---

**Explanation:** An attempt has been made to insert or manipulate data in or create a view on a partitioned table (that is, a table residing in a partitioned table space) before the partitioned index for that table has been created.

A table residing in a partitioned table space cannot be referenced in any SQL manipulative statement or a CREATE VIEW statement before the partitioned index for that table has been created.

**System Action:** A valid plan or package will be created if no errors are detected. The statement is bound dynamically on each execution of the statement.

**Programmer Response:** For better performance, rebind the plan or package after correcting the statement. To correct the statement, verify that the correct table was specified in the statement. If so, ensure that the partitioned index for the table has been created successfully before attempting to execute any SQL manipulative statements that reference that table.

**Destination:** 01551

---

**Explanation:** The CREATE/ALTER STOGROUP statement has caused the STOGROUP with ‘stogroup_name’ to have both specific and non-specific (‘*’) volume Ids. This warning code is used to specify that the mixing of different types of volume Ids will not be allowed in future releases.

**System Action:** DB2 continues processing.
Programmer Response: Plan to use either specific or non-specific volume ids to avoid future release migration impact. ALTER STOGROUP may be used to drop all specific volume ids or all non-specific volume ids.

Destination: 01597

+658 THE SUBPAGES VALUE IS IGNORED FOR THE CATALOG INDEX index-name

Explanation: Only SUBPAGES 1 is allowed for this catalog index.

System Action: The index was altered successfully using SUBPAGES 1. If you are also altering the TYPE option to a new value, the index is placed in recovery pending status.

Destination: 01600

+664 THE INTERNAL LENGTH OF THE LIMIT-KEY FIELDS FOR THE PARTITIONED INDEX index-name EXCEEDS THE LENGTH IMPOSED BY THE INDEX MANAGER

Explanation: The ALTER INDEX statement can change a limit key for a partitioned index (that is, the cluster index for a table residing in a partitioned table space), and the length of the limit key exceeds the permitted maximum.

The index manager restricts the internal length of the limit keys for a partitioned index to a maximum of 40 bytes. The sum of the internal lengths of the limit keys specified in the PART clause of the ALTER INDEX statement exceeds that 40-byte maximum. The limit key was truncated to 40 bytes.

System Action: The specified index was altered but the limit key was truncated to 40 bytes.

Destination: 01540

+738 DEFINITION CHANGE OF object object-name MAY REQUIRE SIMILAR CHANGE ON READ-ONLY SYSTEMS

Explanation: A change was made to the definition of the specified object that may also require a similar change to any read-only shared systems.

System Action: The statement is successfully executed.

Programmer Response: Check the read-only shared systems that have the specified object defined, and determine if a change must be made to the object on those systems.

Destination: 01530

+799 A SET STATEMENT REFERENCES A SPECIAL REGISTER THAT DOES NOT EXIST AT THE SERVER SITE

Explanation: A DB2 server received a SET statement that it does not understand.

System Action: The SET SPECIAL REGISTER request is ignored.

Programmer Response: This SQLCODE can be returned to an application for any SQL statement. This SQLCODE may be masked by other negative SQLCODEs that the SQL statement receives. Processing continues at the server.

Destination: 01519

+802 EXCEPTION ERROR exception-type HAS OCCURRED DURING operation-type OPERA-
TION ON data-type DATA, POSITION position-number

Explanation: The exception error ‘exception-type‘ occurred while doing an ADDITION, SUBTRACTION, MULTIPLI-
CATION, DIVISION, NEGATION, or BUILT-IN FUNCTION operation on a field whose ‘data-type ‘ is DECIMAL, FLOAT, SMALLINT, or INTEGER. The error occurred while processing an arithmetic expression in the SELECT list of an outer SELECT statement, and the position in the select list is denoted by ‘position-number‘. The possible exception types are FIXED POINT OVERFLOW, DECIMAL OVERFLOW, DIVIDE EXCEPTION, EXPONENT OVERFLOW, ZERO DIVIDE, or OUT OF RANGE. The data type displayed in the message may indicate the data type of the temporary internal copy of the data, which may differ from the actual column or literal data type due to conversions by DB2.

A fixed point overflow can occur during any arithmetic operation on either INTEGER or SMALLINT fields.

A decimal overflow exception can occur when one or more nonzero digits are lost because the destination field in any decimal operation is too short to contain the result.

A divide exception can occur on a decimal division operation when the quotient exceeds the specified data-field size. A zero divide exception occurs on any division by zero.

An exponent overflow can occur when the result characteristic of any floating-point operation exceeds 127 and the result fraction is not zero, i.e. the magnitude of the result exceeds approximately 7.2E+75.

Any of the exceptions/overflows can occur during the processing of a Built-In Function. If the ‘operation-type ‘ is FUNC-TION then the error occurred while processing either an input, intermediate, or final value. The cause could be that the value of a parameter is out of range.

Note: Parts of ‘exception-type‘, ‘data-type‘, ‘operation-type‘, and ‘position-number ‘ may or may not be returned in SQLCA, depending upon when the error was detected.

System Action: For each expression in error the indicator variable is set to negative two (-2) to indicate a null value returned. The data variable is unchanged. Execution of the statement continues with all nonerror columns and expressions of the outer SELECT list being returned. If the statement is cursor controlled then the CURSOR will remain open.

Programmer Response: Examine the expression for which the warning occurred to see if the cause (or the likely cause) of the problem can be determined. The problem may be data-dependent, in which case it will be necessary to examine the data that was being processed at the time the error occurred.

See the explanation of SQLCODE -405 for allowed ranges of numeric data types.

Destination: 01527
# if a rollback to the savepoint is performed. # savepoint is outstanding, and the update will not be backed out # table, the operation is performed; however, be advised that a # as the result of an operation to a created global temporary # rary table are not undone. If this SQL warning code is received # ROLLBACK TO SAVEPOINT statement, the rollback is per- # If this SQL warning code is received as the result of a # (inserts into or deletes from) a created global temporary table. #

**Explanation:**

The operations that are referred to are updates # (inserts into or deletes from) a created global temporary table. # If this SQL warning code is received as the result of a # ROLLBACK TO SAVEPOINT statement, the rollback is performed; however, the changes that were made to the temporary table are not undone. If this SQL warning code is received as the result of an operation to a created global temporary table, the operation is performed; however, be advised that a savepoint is outstanding, and the update will not be backed out if a rollback to the savepoint is performed.

**System Action:**

The SQL statement is executed.

**Programmer Response:**

Verify that this is what you meant.

**Destination:**

01640

---

**Explanation:**

A SUBPAGES value of greater than 1 was specified on a CREATE INDEX or ALTER INDEX statement in a data sharing environment. Type 1 indexes with a SUBPAGES value greater than 1 can only be accessed in a data sharing environment in non-group buffer pool dependent mode. Any read or update request that would cause the index to become group buffer pool dependent will be denied with a 'resource unavailable' condition. Only type 2 indexes or type 1 indexes with SUBPAGES 1 can become group buffer pool dependent.

**System Action:**

The statement is successfully executed. If ALTER INDEX was performed, then the index is placed in recovery pending status.

**Destination:**

01638

---

**Explanation:**

This message is issued in response to a CREATE or ALTER of a table space or index in which a buffer pool is named that corresponds to a group buffer pool that is defined with GBPCACHE NO. The corresponding group buffer pool is used only for cross-invalidation. It contains no data entries. All reads and writes are from and to DASD.

**System Action:**

The statement is processed.

**User Response:**

If you want to use one of the GBPCACHE options other than NONE, you must alter the table space or index to use a group buffer pool that is defined with GBPCACHE YES.

**Destination:**

01624

---

**Explanation:**

DB2 is not enabled to use optimization hints. The special register OPTIMIZATION HINT is set to the default value of BLANKS.

**System Action:**

Processing continues normally using the default OPTIMIZATION HINT value. The user-specified optimization hints are ignored. The access path is determined without the use of hints and processing continues normally.

**Programmer Response:**

Enable the use of OPTIMIZATION HINT by changing the value of OPTIMIZATION HINTS on the DB2 Installation panel DSNTIP4.

If, after further consideration, you do not want to use an OPTIMIZATION HINT, change or remove the SET CURRENT OPTIMIZATION HINT statement.

**Destination:**

01602
 DEFINE NO OPTION IS NOT APPLICABLE IN THE CONTEXT SPECIFIED

Explanation: The DEFINE NO option was specified, however it is not applicable in the context specified. DEFINE NO was specified in one of the following situations:

- a CREATE INDEX statement that included the VCAT clause
- a CREATE INDEX statement for a non-empty table
- a CREATE LOB TABLESPACE statement
- a CREATE TABLESPACE statement that included the VCAT clause

System Action: DB2 ignored the DEFINE NO option and created the object with the DEFINE YES option instead.

Destination: 01644

OPERATION COMPLETED SUCCESSFULLY BUT A DISTRIBUTION PROTOCOL VIOLATION HAS BEEN DETECTED. ORIGINAL SQLCODE=original-sqlcode AND ORIGINAL SQLSTATE=original-sqlstate

Explanation: The application requested operation (either COMMIT or ROLLBACK) has completed successfully but the response from the remote server and the SQLCODE that was returned from the remote server are inconsistent. For example, the reply message from the remote server indicates that a COMMIT operation completed successfully but the SQLCODE returned from the AS was negative.

System Action: An alert was generated. A DSNI031I message may have been written to the console. Refer to the description of this message for further information.

The SQLCODE returned by the remote server is replaced with +30100 and the SQLSTATE returned by the remote server is replaced with 01558.

The SQLCODE and SQLSTATE values that were returned from the AS are stored in the SQLERRM field in a string of the following format:

'original-sqlcode 'FF'X original-sqlstate'

Programmer Response: Notify the System Programmer for assistance in analyzing the trace data that was generated.

Destination: 01558
Error SQL codes

-007 STATEMENT CONTAINS THE ILLEGAL CHARACTER character
Explanation: The specified 'character' is not a valid character in SQL statements.
System Action: The statement cannot be executed.
Programmer Response: Correct the syntax and resubmit the statement. Refer to Chapter 3 of DB2 SQL Reference for information about the valid SQL character set.
Destination: 42601

-010 THE STRING CONSTANT BEGINNING string IS NOT TERMINATED
Explanation: The statement contains a string constant, beginning with 'string', that is not terminated properly.
System Action: The statement cannot be executed.
Programmer Response: Examine the statement for missing quotation marks or apostrophes in the indicated string constant.
Destination: 42603

-029 INTO CLAUSE REQUIRED
Explanation: SELECT statements embedded in an application program must have an INTO clause to denote where the results of the SELECT are to be placed. Dynamic SELECT statements do not permit the INTO clause.
System Action: The statement cannot be executed.
Programmer Response: Add the INTO clause to the SELECT statement and precompile the application program again.
Destination: 42601

-060 INVALID type SPECIFICATION : spec
Explanation: 'type' is either LENGTH or SCALE. 'spec' is the specified length or scale. Length or scale must be specified by an unsigned integer constant and the value must be in the range allowed by the data type.
System Action: The statement cannot be executed.
Programmer Response: Correct the statement. Refer to Chapter 3 of DB2 SQL Reference for rules for length and scale.
Destination: 42815

-079 QUALIFIER FOR DECLARED GLOBAL TEMPORARY TABLE table-name MUST BE SESSION, NOT qualifier
Explanation: The qualifier for a declared temporary table must be SESSION. The DECLARE GLOBAL TEMPORARY TABLE statement defines a new temporary table named table-name with an explicit qualifier of qualifier. Specifying a qualifier other than SESSION is not allowed.
System Action: The statement was not executed.
Programmer Response: Change the statement in one of the following ways:
- Change the qualifier to SESSION.
- Remove the qualifier, and let DB2 default it to SESSION.
Destination: 42601

-084 UNACCEPTABLE SQL STATEMENT
Explanation: This SQL statement is unacceptable to DB2. One of the following has occurred:
- An attempt has been made to PREPARE or EXECUTE IMMEDIATE an SQL statement that cannot be prepared; refer to the proper SQL statement in DB2 SQL Reference.
- The embedded SQL statement is not an SQL statement supported by DB2.
- The statement referenced an undeclared cursor.
- An attempt was made to prepare an ALLOCATE CURSOR statement but the statement identifier is already associated with a declared cursor.
System Action: The statement cannot be executed.
Programmer Response: If the situation involves an SQL statement that cannot be prepared, the problem is in the source of the SQL statement, not the application program. Thus, no action is necessary unless the source of the SQL statement is the application program itself.
If the situation involves an SQL statement that is not supported by DB2, remove it from the application program and recompile again.
If the situation involves an invalid PREPARE of an ALLOCATE CURSOR statement, change the application program to use a statement identifier that is not associated with a declared cursor.
Destination: 42612

-097 THE USE OF LONG VARCHAR OR LONG VARGRAPHIC IS NOT ALLOWED IN THIS CONTEXT
Explanation: The statement attempted to use the LONG VARCHAR or LONG VARGRAPHIC syntax. This syntax cannot be used for the following statements:
- CAST syntax
- CREATE DISTINCT TYPE
- CREATE FUNCTION
- CREATE PROCEDURE
- ALTER FUNCTION
- COMMENT ON FUNCTION
- GRANT EXECUTE ON FUNCTION
- REVOKE EXECUTE ON FUNCTION
Use the VARCHAR or VARGRAPHIC syntax specifying an explicit length as required.
System Action: The statement cannot be executed.
Programmer Response: Correct the statement.
Destination: 42601
-101  THE STATEMENT IS TOO LONG OR TOO COMPLEX

Explanation:  The statement cannot be executed because it exceeds the system limits for either length or complexity. Enabling parallelism will increase the complexity of the statement.

System Action:  The statement cannot be executed.

Programmer Response:  Break the statement up into shorter or less complex SQL statements. If parallelism is enabled, try disabling parallelism by using the DEGREE(1) bind option for static SQL or by setting the CURRENT DEGREE special register to '1' for dynamic SQL.

Destination:  42601

-102  LITERAL STRING IS TOO LONG. STRING BEGINS string

Explanation:  The string constant beginning with 'string' has a length greater than 255 characters or 124 graphic characters. Character strings with lengths greater than 255 and graphic strings with lengths greater than 124 can be specified only through assignment from host variables.

For special registers, the allowable length depends on the particular special register. See Chapter 3 of the SQL Reference to determine the maximum length of a value for a special register.

Two consecutive string delimiters are used to represent one string delimiter within the character string, but these count as 2 bytes when calculating the lengths of character string constants.

System Action:  The statement cannot be executed.

Programmer Response:  Correct the invalid literal.

Destination:  54002

-103  literal IS AN INVALID NUMERIC LITERAL

Explanation:  The indicated 'literal' begins with a digit, but is not a valid integer, decimal, or float literal.

System Action:  The statement cannot be executed.

Programmer Response:  Correct the invalid literal.

Destination:  42604

-104  ILLEGAL SYMBOL "token". SOME SYMBOLS THAT MIGHT BE LEGAL ARE: token-list

Explanation:  A syntax error was detected where the symbol "token" occurs in the SQL statement. The list of symbols that might be legal shows some alternate symbols that could possibly be correct at that point, if the preceding part of the statement is entirely correct.

However, the preceding part of the statement might be incorrect. For example, if an important keyword is omitted, DB2 detects the error later, and not always immediately after the point where the keyword should appear. The list of alternate symbols are only suggestions. Some of those symbols might not even be legal for statements to be executed by DB2. Those symbols are possibly correct for statements sent to other database management systems.

Destination:

# This SQL code will also be issued if the RELEASE TO SAVEPOINT statement is specified without a savepoint name.

System Action:  The statement cannot be executed.

Programmer Response:  Correct the statement and execute it again.

Destination:  42601

-105  INVALID STRING

Explanation:  The statement contains an invalid string. It is neither a character string nor a graphic string.

System Action:  The statement cannot be executed.

Programmer Response:  Specify the correct format of the string. Check for a graphic string, paired delimiters, the character G or N, and an even number of bytes within the string.

Destination:  42604

-107  THE NAME name IS TOO LONG. MAXIMUM ALLOWABLE SIZE IS size

Explanation:  The name is too long. The maximum permissible length for names of that type is indicated by size.

# Names for the following cannot contain more than 128 characters:
#   • Savepoint-name

Names for the following cannot contain more than 64 characters:
#   • Version-id

Names for the following cannot contain more than 18 characters (20 including SQL escape characters, if present):
#   • SQL columns
#   • SQL tables
#   • SQL views
#   • SQL indexes
#   • SQL aliases
#   • SQL synonyms
#   • Collection-ids
#   • Check constraints
#   • Functions
#   • Stored procedures
#   • User-defined types

Names for the following cannot contain more than 16 characters:
#   • Location-name

The following cannot contain more than 8 characters:
#   • Table qualifiers
#   • View qualifiers
#   • Library member names specified in an INCLUDE statement
#   • Storage group names
#   • Database names
#   • Table space names
#   • Application plans
#   • Database request modules (DBRMs)
#   • Referential constraint names specified in CREATE or ALTER TABLE statements
#   • Package-id
#   • Schema names
#   • Trigger names

32  Messages and Codes
Host variable names cannot contain more than 64 characters.
Volume serial numbers cannot contain more than 6 characters.
Labels cannot contain more than 30 characters.

**System Action:** The statement cannot be executed.

**Programmer Response:** Choose a shorter name for the object.

**Destination:** 42622

---

**-108**  
**THE NAME name IS QUALIFIED INCORRECTLY**

**Explanation:** The name name is improperly qualified.

A target name on the RENAME statement may not have a qualifier.

**System Action:** The statement cannot be executed.

**Programmer Response:** Remove the qualifier and reissue the statement.

**Destination:** 42601

---

**-109**  
**clause CLAUSE IS NOT PERMITTED**

**Explanation:** The indicated clause is not permitted in the context in which it appears in this SQL statement for the following reasons:

- A subselect cannot have an INTO clause.
- A CREATE VIEW statement cannot have INTO, ORDER BY, or FOR UPDATE clauses.
- An embedded SELECT statement cannot have ORDER BY or FOR UPDATE clauses
- SELECT statements used in cursor declarations cannot have an INTO clause.
- A RAISE_ERROR function can only be used as a select list item if it is cast to some data type using the CAST specification.
- DESCRIBE INPUT statement cannot have USING clause.
- QUERYNO cannot be specified as part of an EXPLAIN statement when the EXPLAIN statement contains an 'explainable-sql-statement'.
- The table being updated in a POSITIONED UPDATE statement cannot be assigned a correlation name.

If the clause is part of a CREATE INDEX, CREATE TABLE, CREATE TABLESPACE or ALTER TABLESPACE statement, see the appropriate section of the SQL Reference for a description of the valid use of clauses for the statement.

**System Action:** The statement cannot be executed.

**Programmer Response:** Correct the SQL statement.

**Destination:** 42601

---

**-111**  
**A COLUMN FUNCTION DOES NOT INCLUDE A COLUMN NAME**

**Explanation:** For example, the specification of a column function (AVG, MAX, MIN, or SUM) was invalid because such functions must include a column name in the operand. In a trigger definition, a transition variable specification does not qualify as a column name for this purpose.

**System Action:** The statement cannot be executed.

**Programmer Response:** A column name must be specified as an operand to the function. Refer to Chapter 4 of DB2 SQL Reference for information about the proper usage of column functions.

**Destination:** 42901

---

**-112**  
**THE OPERAND OF A COLUMN FUNCTION IS ANOTHER COLUMN FUNCTION**

**Explanation:** The operand of a column function can be either an expression or DISTINCT followed by an expression. The operand cannot be another column function.

**System Action:** The statement cannot be executed.

**Programmer Response:** Correct the function specification.

Refer to Chapter 4 of DB2 SQL Reference for information about the proper usage of column functions.

**Destination:** 42607

---

**-113**  
**INVALID CHARACTER FOUND IN string, REASON CODE nnn**

**Explanation:** The string contains an invalid character. It can be an SQL ordinary identifier name, a host variable name, or a DBCS comment.

For SBCS SQL ordinary identifiers, names of buffer pools, databases, plans, and storage groups must contain only uppercase alphabetic or national characters and numerics when CHARSET is KATAKANA; the first character must be alphabetic or national.

The following reason codes apply to SBCS identifiers:

- 000 An invalid character was found in the SBCS identifier (including the case in which a DBCS identifier was used where only an SBCS identifier is allowed.)

The following reason codes apply to DBCS identifiers or comments:

- 101 An odd number of bytes exists between the shift-out and the shift-in character.
- 102 Either a shift-in or shift-out character is missing.
- 103 DBCS blanks X'4040' are not allowed.
- 104 There are no characters between the shift-out and the shift-in characters.
- 105 Shift-out cannot be the first byte of the DBCS character between the shift-out and the shift-in characters.

**System Action:** Processing is terminated.

**User Response:** Correct the name.

**Destination:** 42602
-114  THE LOCATION NAME location DOES NOT MATCH THE CURRENT SERVER  

Explanation: A 3-part SQL procedure name was provided for one of the following SQL statements:

ASSOCIATE LOCATORS
CALL
DESCRIBE PROCEDURE

The first part of the SQL procedure name, which specifies the location where the stored procedure resides, did not match the value of the SQL CURRENT SERVER special register.

System Action: The statement cannot be executed.

Programmer Response: Take one of these actions to resolve the mismatch:

- Change the location qualifier to match the CURRENT SERVER special register.
- Issue an SQL CONNECT to the location where the stored procedure resides before issuing the SQL statement. Ensure that the SQL CALL statement is issued before the ASSOCIATE LOCATORS or DESCRIBE PROCEDURE.
- Bind the package containing the 3-part SQL procedure name with the BIND option DBPROTOCOL(DRDA). With this option, DB2 implicitly uses the DRDA protocol for remote access to the stored procedure.
- Correct the statements so that the exact syntax used to specify the procedure name on the CALL statement be the same as that on the ASSOCIATE LOCATOR or DESCRIBE PROCEDURE. If an unqualified name is used to CALL the procedure, the 1-part name must also be used on the other statements. If the CALL statement is made with a 3-part name, and the current server is the same as the location in the 3-part name, the ASSOCIATE LOCATOR or DESCRIBE procedure can omit the location.

Destination: 42961

-115  A PREDICATE IS INVALID BECAUSE THE COMPARISON OPERATOR operator IS FOLLOWED BY A PARENTHESIZED LIST OR BY ANY OR ALL WITHOUT A SUBQUERY

Explanation: A simple comparison like ’>’ must not be followed by a list of items. ANY and ALL comparisons must be followed by a subselect, rather than an expression or a list of items.

System Action: The statement cannot be executed.

Programmer Response: Correct the SQL statement. Refer to Chapter 6 of DB2 SQL Reference for information about the syntax of SQL statements.

Destination: 42601

# -117  THE NUMBER OF VALUES ASSIGNED IS NOT THE SAME AS THE NUMBER OF SPECIFIED OR IMPLIED COLUMNS

Explanation: The number of insert values in the value list of the INSERT statement is not the same as the number of object columns specified. Alternatively, the number of values on the right side of an assignment in a SET assignment statement or the SET clause of an UPDATE statement does not match the number of columns on the left side.

System Action: The statement cannot be executed.

Programmer Response: Correct the SQL statement. Refer to Chapter 6 of DB2 SQL Reference for information about the syntax of SQL statements.

Destination: 42803

-118  THE OBJECT TABLE OR VIEW OF THE DELETE OR UPDATE STATEMENT IS ALSO IDENTIFIED IN A FROM CLAUSE

Explanation: For a DELETE statement, the table or view that is specified as the object of the DELETE statement also appears in the FROM clause of a subselect. For an UPDATE statement, the following conditions are true:

- A table or view that is specified as the object of the UPDATE statement also appears in the FROM clause of a subselect.
- A column that is updated is the same as a column in the subselect, and the column in the subselect is from a table or view in the FROM clause of the subselect.
- The table or view that is the object of the UPDATE or DELETE cannot also be used to supply the values that specify the rows to be updated or deleted.

System Action: The statement cannot be executed. No data was updated or deleted.

Programmer Response: The implied function is not supported by DB2. It may be possible to obtain the desired result by creating a temporary copy of the object table or view and addressing the subselect to that copy. Refer to Chapter 6 of DB2 SQL Reference for information about the syntax of SQL statements.

Destination: 42902

-119  A COLUMN IDENTIFIED IN A HAVING CLAUSE IS NOT INCLUDED IN THE GROUP BY CLAUSE

Explanation: A column identified in a HAVING clause (possibly within a scalar function) does not appear in the GROUP BY clause. Columns specified in a HAVING clause must appear within column functions or also be specified in the GROUP BY clause.

System Action: The statement cannot be executed.

Programmer Response: The implied function is not supported by DB2. Refer to Chapter 5 of DB2 SQL Reference for information about the proper usage of HAVING and GROUP BY clauses.

Destination: 42803

-120  A WHERE CLAUSE, SET CLAUSE, VALUES CLAUSE, OR A SET ASSIGNMENT STATEMENT INCLUDES A COLUMN FUNCTION

Explanation: A column function or a user-defined function that is sourced on a column function is not permitted in a SET clause, a VALUES clause, or a SET assignment statement. A column function or a user-defined function that is sourced on a column function is allowed in a WHERE clause only if the WHERE clause appears within a subquery of a HAVING clause.

System Action: The statement cannot be executed.
**Note:** The 'column-name' may or may not be returned in SQLCA, depending on the nature of the error occurring in the SQL statement.

**Programmer Response:** The implied function is not supported by DB2. Refer to Chapter 5 of DB2 SQL Reference for information about restrictions on operands that can be specified within WHERE, SET and VALUES clauses and SET assignment statements.

**Destination:** 42903

---

**-121** THE COLUMN name IS IDENTIFIED MORE THAN ONCE IN THE INSERT OR UPDATE OR SET TRANSITION VARIABLE STATEMENT

**Explanation:** The same column 'name' is specified more than once, either in the list of object columns of an INSERT statement, in the SET clause of an UPDATE statement, or in a SET transition variable statement.

**System Action:** The statement cannot be executed. No data was inserted or updated in the object table.

**Programmer Response:** Correct the syntax of the statement so that each column name is specified only once.

**Destination:** 42701

---

**-122** A SELECT STATEMENT WITH NO GROUP BY CLAUSE CONTAINS A COLUMN NAME AND A COLUMN FUNCTION IN THE SELECT CLAUSE OR A COLUMN NAME IS CONTAINED IN THE SELECT CLAUSE BUT NOT IN THE GROUP BY CLAUSE

**Explanation:** The SELECT statement contains one of these errors:

- The statement contains a column name and a column function in the SELECT clause, but no GROUP BY clause.
- A column name is contained in the SELECT clause (possibly within a scalar function) but not in the GROUP BY clause.

**Note:** A HAVING clause specified without a GROUP BY clause implies a GROUP BY with no columns. Thus, no column names are allowed in the SELECT clause.

**System Action:** The statement cannot be executed.

**Programmer Response:** You can correct the statement by:

- including the columns in the GROUP BY clause that are in the SELECT clause, or
- removing the columns from the SELECT clause.

Refer to Chapter 5 of DB2 SQL Reference for information about the use of GROUP BY clauses in SQL statements.

**Destination:** 42803

---

**-123** THE PARAMETER IN POSITION n IN THE FUNCTION name MUST BE A CONSTANT OR KEYWORD

**Explanation:** The parameter in position n in the function name is not a constant when it is required to be a constant or a keyword when it is required to be a keyword.

**System Action:** The statement could not be processed.

**Programmer Response:** Action: Ensure that each argument of the function conforms to the definition of the corresponding parameter.

**Destination:** 42601

---

**-125** AN INTEGER IN THE ORDER BY CLAUSE DOES NOT IDENTIFY A COLUMN OF THE RESULT

**Explanation:** The ORDER BY clause in the statement contains a column number that is either less than one, or greater than the number of columns of the result table (the number of items in the SELECT clause).

**System Action:** The statement cannot be executed.

**Programmer Response:** Correct the syntax of the ORDER BY clause such that each column identifier properly denotes a column of the result table.

**Destination:** 42805

---

**-126** THE SELECT STATEMENT CONTAINS BOTH AN UPDATE CLAUSE AND AN ORDER BY CLAUSE

**Explanation:** The SELECT statement in the declaration for a cursor contains both an UPDATE clause and an ORDER BY clause. An ORDER BY clause cannot be specified in the declaration for a cursor that is to be used for update.

**System Action:** The statement cannot be executed. The cursor remains undefined in the application program.

**Programmer Response:** The implied function is not supported by DB2. A cursor that is to be used for update cannot be defined to fetch the rows of the object table in a specific order.

Refer to Chapter 5 of DB2 SQL Reference for information about restrictions on the declarations for cursors to be used for update.

**Destination:** 42829

---

**-127** DISTINCT IS SPECIFIED MORE THAN ONCE IN A SUBSELECT

**Explanation:** The DISTINCT qualifier can be used only once in a SELECT statement or a subselect.

**System Action:** The statement cannot be executed.

**Programmer Response:** The implied function is not supported by DB2. Refer to Chapter 5 of DB2 SQL Reference for information about restrictions on the use of the DISTINCT qualifier.

**Destination:** 42905

---

**-128** INVALID USE OF NULL IN A PREDICATE

**Explanation:** The use of NULL in the search condition does not conform to the rules of SQL syntax.

**System Action:** The statement cannot be executed.

**Programmer Response:** The implied function is not supported by DB2. Refer to Chapter 3 of DB2 SQL Reference for information about the proper use of the NULL operand.

**Destination:** 42601
THE STATEMENT CONTAINS TOO MANY TABLE NAMES

**Explanation:** A subselect (including all subqueries) can have a maximum of 225 references to table names.

**System Action:** The statement cannot be executed.

**Programmer Response:** Break the SQL statement into two or more simpler statements with less than 225 table references in each. The count will include the number of base table occurrences from each table or view on the FROM list. Refer to Chapter 5 of DB2 SQL Reference for the definition of a subselect.

**Destination:** 54004

THE ESCAPE CLAUSE CONSISTS OF MORE THAN ONE CHARACTER, OR THE STRING PATTERN CONTAINS AN INVALID OCCURRENCE OF THE ESCAPE CHARACTER

**Explanation:** The ESCAPE character must be a single character, either SBCS or DBCS as appropriate. For 'column-name LIKE pattern ', the ESCAPE character can only appear in the character string if it is followed by itself, %, or _ (underscore). The Escape Clause cannot be specified if the column name at the left of the LIKE or NOT LIKE has the MIXED subtype.

**System Action:** The statement cannot be executed.

**Programmer Response:** Correct the string pattern, or choose a different ESCAPE character and change the pattern accordingly, or eliminate the use of the Escape Clause on the LIKE or NOT LIKE predicate where the column name to the left has the MIXED subtype.

**Destination:** 22019 if other than invalid ESCAPE pattern. 22025 if invalid ESCAPE pattern.

STATEMENT WITH LIKE PREDICATE HAS INCOMPATIBLE DATA TYPES

**Explanation:** If the column name at the left of LIKE or NOT LIKE is of type character, the expression at the right and the ESCAPE character must be of type character. If the column name is of type graphic, the expression at the right and the ESCAPE character must be of type graphic.

**System Action:** The statement cannot be executed.

**Programmer Response:** Check the data type of every operand.

**Destination:** 42818

AN OPERAND OF value IS NOT VALID

**Explanation:** The operation value can be the LIKE predicate, the ESCAPE clause, the LOCATE scalar function, or the POSSTR scalar function.

The following must be string expressions:

- The operands appearing to the left of a LIKE or NOT LIKE predicate
- The operand appearing in the ESCAPE clause
- The first two arguments to the LOCATE function
- The arguments to the POSSTR function

See the for the rules of what can be specified in each context.

**System Action:** The statement cannot be executed.

**Programmer Response:** The statement must be modified such that the internal length of the sort key will not exceed 4000 bytes.

**Destination:** 42824

A COLUMN FUNCTION IN A SUBQUERY OF A HAVING CLAUSE IS INVALID BECAUSE ALL COLUMN REFERENCES IN ITS ARGUMENT ARE NOT CORRELATED TO THE GROUP BY RESULT THAT THE HAVING CLAUSE IS APPLIED TO

**Explanation:** If a column function has a correlated column reference, it must be correlated from within a HAVING clause to the GROUP BY result that the HAVING clause is applied to. All column references in the argument must satisfy this condition.

**System Action:** The statement cannot be executed.

**Programmer Response:** Refer to Chapter 5 of DB2 SQL Reference for information about restrictions on the syntax of the HAVING clause.

**Destination:** 42906

IMPROPER USE OF LONG STRING COLUMN column-name OR AN EXPRESSION THAT RESolves TO A LONG STRING

**Explanation:** The SQL statement references a long string, but DB2 does not allow the use of long strings in the specified context. For an exhaustive list of such contexts, refer to “Varying Length Character Strings” in Chapter 3 of DB2 SQL Reference.

**System Action:** DB2 cannot process the statement.

**Note:** Depending on the nature of the error and the syntax in which it occurred, DB2 might not return the column-name in the SQLCA.

**Programmer Response:** DB2 does not support the requested operation on a long string value. Refer to Chapter 3 of DB2 SQL Reference for information about restrictions on the specification and manipulation of long string values.

**Destination:** 42907

SORT CANNOT BE EXECUTED BECAUSE THE SORT KEY LENGTH IS GREATER THAN 4000 BYTES

**Explanation:** A sort key is derived from the list of columns specified following a DISTINCT qualifier, or in an ORDER BY or GROUP BY clause. If both a DISTINCT qualifier and an ORDER BY or GROUP BY clause are present, the sort key is derived from the combination of both lists of columns.

The internal length of the sort key cannot exceed 4000 bytes. In attempting to process the SQL statement, the internal length of the sort key derived from the DISTINCT and/or ORDER BY or GROUP BY specifications was found to exceed that 4000-byte maximum.

**System Action:** The statement cannot be executed.

**Programmer Response:** The statement must be modified such that the internal length of the sort key will not exceed 4000 bytes.
4000 bytes. In general, this means that one or more column names must be deleted from the ORDER BY or GROUP BY clause, or the list following the DISTINCT qualifier.

**Destination:** 54005

-137 \* THE LENGTH RESULTING FROM operation IS GREATER THAN maximum-length

**Explanation:** The length of the result of concatenation or a function exceeds the defined maximum. The operation that resulted in the error is operation.

- For concatenation, the length cannot exceed 32,764 (if character operands) or 16,382 (if graphic operands).
- For other functions, see DB2 SQL Reference for the maximum result length.

**System Action:** The statement cannot be executed.

**Programmer Response:** Ensure that the length of the result does not exceed the defined maximum.

**Destination:** 54006

-138 \* THE SECOND OR THIRD ARGUMENT OF THE SUBSTR FUNCTION IS OUT OF RANGE

**Explanation:** One of the following conditions exists:
- The second argument of the SUBSTR function is less than 1 or greater than M.
- The third argument of the SUBSTR function is an integer constant 0 or an expression whose value is less than 0 or greater than M+N+1.

M is the length of the first argument, if it is of fixed-length, or M is the maximum length of the first argument, if it is of varying-length. N is the value of the second argument.

**System Action:** The statement cannot be executed.

**Programmer Response:** Ensure that the second and third arguments of the SUBSTR function have legal values according the above rules.

**Destination:** 22011

-142 \* THE SQL STATEMENT IS NOT SUPPORTED

**Explanation:** An SQL statement was detected that is not supported by the database. The statement might be valid for other IBM relational database products or it might be valid in another context. For example, statements such as VALUES and SIGNAL SQLSTATE can appear only inside a trigger.

**System Action:** The statement cannot be executed.

**Programmer Response:** Change the syntax of the SQL statement or remove the statement from the program.

**Destination:** 42612

-144 \* INVALID SECTION NUMBER number

**Explanation:** One of the following:
1. The user attempted to execute an invalid section.
2. This release of DB2 does not support the SQL statement.
3. The section number in the call parameter list is one of these:
   - Negative
   - An invalid duplicate

- Greater than the maximum section number of the DBRM or package.

**System Action:** The statement is not executed.

**Programmer Response:** For case 1: If you are executing a package that was bound with SQLERROR(CONTINUE), determine whether the statement in question was bound as a valid section. You can use the following statements to query the DB2 catalog:

```sql
SELECT SQLERROR
FROM SYSIBM.SYSPACKAGE
WHERE COLLID = collection-id AND
NAME = package-id AND
VERSION = version-name;
```

If that query returns 'C', the package was bound with SQLERROR(CONTINUE).

For case 2: If the DB2 system has fallen back to a previous release, determine whether there are any SQL statements with a section number of zero that are not supported by that release. You can use the following statements to query the DB2 catalog.

When executing from a DBRM, use:

```sql
SELECT *
FROM SYSIBM.SYSSTMT
WHERE SECTNO = 0 AND
ORDER BY NAME, PLNAME, STMTNO, SEQNO;
```

When executing from a package, use:

```sql
SELECT *
FROM SYSIBM.SYSPACKSTM
WHERE SECTNO = 0 AND
ORDER BY COLLID, NAME, VERSION, STMTNO, SEQNO;
```

For case 3: Examine the application to determine whether the call parameter list was changed in some way. In general, you should not attempt to change the output of the precompiler.

**Destination:** 58003

-147 \* ALTER FUNCTION function-name FAILED BECAUSE SOURCE FUNCTIONS CANNOT BE ALTERED

**Explanation:** The function cannot be altered because it is a source function. Only external scalar functions, or external table functions can be altered.

To change an existing source function, you must DROP the function and recreate it.

**System Action:** The statement cannot be executed.

**Programmer Response:** Change the statement to refer to a function that can be altered, or recreate the function by dropping it and then creating a new version of it.

**Destination:** 42809
-148  THE SOURCE TABLE source-name CANNOT BE RENAMED OR ALTERED

Explanation: Possible cases:
1. The RENAME statement cannot be used to rename a view, an active RLST table, or a table for which a synonym is defined.
2. The ALTER statement cannot be used to alter the length of the column because the column is referenced in a referential integrity relation, a user exit (field procedure, edit procedure, valid procedure, stored procedure or user defined function), a global temporary table, or a table defined with data capture changes. If the table name specified in the alter is a view or if there exists a row in SYSVIEWDEP that has source-name as a base table name, then this ALTER statement will fail.

System Action: The statement cannot be executed.

Programmer Response: For case:
1. Drop all views, inactivate the RLST table, or drop the synonym.
2. Avoid referential integrity relations, user exits, or global temporary tables.
3. Run REORG INDEX, REORG TABLESPACE, or REBUILD INDEX. If the index is partitioned, then run the utility on all the partitions. Reissue the statement.

Destination: 42809

-150  THE OBJECT OF THE INSERT, DELETE, OR UPDATE STATEMENT IS A VIEW OR TRANSITION TABLE FOR WHICH THE REQUESTED OPERATION IS NOT PERMITTED

Explanation: One of the following occurred:
- A transition table was named in an INSERT, UPDATE, or DELETE statement in a triggered action. Transition tables are read-only.
- The view named in the INSERT, UPDATE, or DELETE statement is defined in such a way that the requested insert, update, or delete operation cannot be performed upon it.

Inserts into a view are prohibited if:
- The view definition contains a join, a GROUP BY, or a HAVING clause.
- The SELECT clause in the view definition contains the DISTINCT qualifier, an arithmetic expression, a string expression, a built-in function, or a constant.
- Two or more columns of the view are derived from the same column.
- A base table of the view contains a column that does not have a default value and is not included in the view.

Updates to a view are prohibited if:
- The view definition contains a join, a GROUP BY, or a HAVING clause.
- The SELECT clause in the view definition contains the DISTINCT qualifier or a function.

Also, a given column in a view cannot be updated (that is, the values in that column cannot be updated) if the column is derived from an arithmetic expression, a constant, a column that is part of the key of a partitioned index, or a column of a catalog table that cannot be updated.

Deletes against a view are prohibited if:
- The view definition contains a join, a GROUP BY, or a HAVING clause.
- The SELECT clause in the view definition contains the DISTINCT qualifier or a built-in function.

System Action: The statement cannot be executed. No data was inserted, updated, or deleted.

Programmer Response: The requested function cannot be performed on the view. Refer to Chapter 6 of DB2 SQL Reference for further information regarding inserting, deleting, and updating views.

If the error occurred on a CREATE TRIGGER statement, remove the INSERT, UPDATE, or DELETE reference to the transition table.

Destination: 42807

-151  THE UPDATE STATEMENT IS INVALID BECAUSE THE CATALOG DESCRIPTION OF COLUMN column-name INDICATES THAT IT CANNOT BE UPDATED

Explanation: The specified column cannot be updated for one of the following reasons:
- The values for columns occurring in the partitioning key of a partitioned table cannot be updated.
- The object table is a view and the specified column is defined (in the definition of the view) in such a way that it cannot be updated.
- The object table is a catalog table with no columns that can be updated.
- The object column is a ROWID column.
- The object column is defined with the AS IDENTITY and GENERATED ALWAYS attributes.
- The specified column of catalog tables cannot be updated because the column itself is not updatable.

Individual columns in a view cannot be updated for one of the following reasons:
- The column is derived from an SQL function, an arithmetic expression, or a constant.
- The column is defined for a column of an underlying view that cannot be updated.
- The column is defined for a read-only view.
- The column is defined for a column that is in the partitioning key of a partitioned table.

System Action: The statement cannot be executed. No data was updated in the object table or view.

Programmer Response: The requested function is not supported by DB2. Refer to the description of the UPDATE statement in Chapter 6 of DB2 SQL Reference for information about restrictions on the ability to update ROWID columns, identity columns, and columns in partitioned tables and views.

Destination: 42808
-152  THE DROP clause CLAUSE IN THE ALTER STATEMENT IS INVALID BECAUSE constraint-name IS A constraint-type

Explanation: Either the DROP FOREIGN KEY clause of an ALTER TABLE statement tried to drop a check constraint, or the DROP CHECK clause of an ALTER TABLE statement tried to drop a referential constraint.

The clause is either CHECK or FOREIGN KEY. The constraint-type is either REFERENTIAL CONSTRAINT or CHECK CONSTRAINT.

System Action: The ALTER TABLE DROP statement cannot be executed. No object was dropped.

Programmer Response: Drop the existing object with the correct DROP clause of the ALTER TABLE statement.

Destination: 42809

-153  THE STATEMENT IS INVALID BECAUSE THE VIEW OR TABLE DEFINITION DOES NOT INCLUDE A UNIQUE NAME FOR EACH COLUMN

Explanation: You must specify a list of column names if the result table of the subselect that is specified in the CREATE VIEW or DECLARE GLOBAL TEMPORARY TABLE statement has duplicate column names or an unnamed column (a column from a constant, function, or expression).

System Action: The statement cannot be executed. The specified view was not created, or the declared temporary table was not declared.

Programmer Response: Correct the statement by providing a list of names for the columns of the view. Refer to Chapter 6 of DB2 SQL Reference for information about the syntax of the CREATE VIEW statement or the DECLARE GLOBAL TEMPORARY TABLE statement.

Destination: 42908

-154  THE STATEMENT FAILED BECAUSE VIEW OR TABLE DEFINITION IS NOT VALID

Explanation: The view defined in the CREATE VIEW statement or the table declared in the DECLARE GLOBAL TEMPORARY TABLE statement is not valid because the view or table definition contains one of the following:

- UNION or UNION ALL
- a reference to a remote object

System Action: The statement cannot be executed. The specified object is not defined.

Programmer Response: Refer to Chapter 6 of DB2 SQL Reference for information about restrictions on the definitions for views or declared temporary tables.

Destination: 42909

-156  THE STATEMENT DOES NOT IDENTIFY A TABLE

Explanation: The statements ALTER TABLE, DROP TABLE, LOCK TABLE, CREATE INDEX, and CREATE TRIGGER apply only to tables. Indexes and triggers can be defined only on tables.

System Action: The statement cannot be executed. The specified view or remote object was not altered, dropped, or locked, or the index or trigger was not created.

Programmer Response: Verify that the proper name was specified in the statement.

Destination: 42809

-157  ONLY A TABLE NAME CAN BE SPECIFIED IN A FOREIGN KEY CLAUSE. object-name IS NOT THE NAME OF A TABLE.

Explanation: The indicated object was identified in a FOREIGN KEY clause of a CREATE or ALTER TABLE statement. A FOREIGN KEY clause must identify a table.

System Action: The statement cannot be executed.

Programmer Response: Correct the statement to specify a table name in the foreign key clause.

Destination: 42810

-158  THE NUMBER OF COLUMNS SPECIFIED FOR THE VIEW IS NOT THE SAME AS THE NUMBER OF COLUMNS SPECIFIED BY THE SELECT CLAUSE, OR THE NUMBER OF COLUMNS SPECIFIED IN THE CORRELATION CLAUSE IN A FROM CLAUSE IS NOT THE SAME AS THE NUMBER OF COLUMNS IN THE CORRESPONDING TABLE, VIEW, TABLE EXPRESSION, OR TABLE FUNCTION

Explanation: There are two cases:

- The number of column names specified for a view in a CREATE VIEW statement must equal the number of elements (column names, SQL functions, expressions, etc.) specified in the following AS SELECT clause.
- The number of column names specified in a correlation clause must equal the number of columns in the corresponding table, view, table expression or table function.

System Action: The statement cannot be executed.

Programmer Response: Correct the syntax of the statement to specify a column name for each column in the corresponding object (table, view, etc.). Refer to Chapter 6 of DB2 SQL Reference for information about the syntax of the statement.

Destination: 42811

-159  DROP OR COMMENT ON object IDENTIFIES A(N) object-type1 RATHER THAN A(N) object-type2

Explanation: The object specified in the DROP VIEW statement, DROP ALIAS statement, or COMMENT ON ALIAS statement identifies a table instead of a view or an alias.

The DROP VIEW statement can have only a view as its object. The DROP ALIAS or COMMENT ON ALIAS statement can have only an alias as its object. You must use the DROP
TABLE statement to drop a table that is neither a view nor an alias. You must use the COMMENT ON TABLE statement to comment on a table or view.

System Action:  The statement cannot be executed.

Programmer Response:  Correct the DROP VIEW, DROP ALIAS, or COMMENT ON ALIAS statement so that the view name or the alias name is specified correctly (with the proper qualifier). If you intended to drop or comment on the specified table, use the DROP TABLE or COMMENT ON TABLE statement.

Destination:  42809

-160  THE WITH CHECK OPTION CANNOT BE USED FOR THE SPECIFIED VIEW

Explanation:  The WITH CHECK OPTION does not apply to a view definition under either of the following circumstances:

- The view is read-only (for example, the view definition includes DISTINCT GROUP BY, or JOIN).
- The view definition includes a subquery.

System Action:  The statement cannot be executed. The specified view was not created.

Programmer Response:  Refer to Chapter 6 of DB2 SQL Reference for rules regarding use of the WITH CHECK OPTION in view definitions.

Destination:  42813

-161  THE INSERT OR UPDATE IS NOT ALLOWED BECAUSE A RESULTING ROW DOES NOT SATISFY THE VIEW DEFINITION

Explanation:  The WITH CHECK OPTION applies to the view that is the object of the INSERT or UPDATE statement. Consequently, all attempts to insert or update rows in that view are checked to ensure that the results will conform to the view definition.

System Action:  The statement cannot be executed. No inserts or updates were performed, and the contents of the object view (and underlying base table) remain unchanged.

Programmer Response:  Examine the view definition to determine why the requested INSERT or UPDATE was rejected. Note that this may be a data-dependent condition.

Destination:  44000

-164  auth-id1 DOES NOT HAVE THE PRIVILEGE TO CREATE A VIEW WITH QUALIFICATION authorization ID

Explanation:  The authorization ID ‘auth-id’ does not have the authority necessary to create views with qualifiers other than its own authorization ID. Specifically, the attempt to create a view with qualifier ‘authorization ID’ is rejected.

System Action:  The statement cannot be executed. The specified view was not created.

Programmer Response:  Do not attempt to create views with other than your own ID as a qualifier. Only an authorization ID that holds ‘SYSDM’ authority can create views for other authorization IDs.

Destination:  42502

-170  THE NUMBER OF ARGUMENTS SPECIFIED FOR function-name IS INVALID

Explanation:  An SQL statement includes the scalar function ‘function-name’ with either too many or too few arguments.

System Action:  The statement cannot be executed.

Programmer Response:  Correct the statement. Refer to Chapter 4 of DB2 SQL Reference for information about the number of arguments required by the scalar function ‘function-name’.

Destination:  42605

-171  THE DATA TYPE, LENGTH, OR VALUE OF ARGUMENT nn OF function-name IS INVALID

Explanation:  Either the data type, the length or the value of argument nn of scalar function function-name is incorrect.

System Action:  The statement cannot be executed.

Programmer Response:  Correct the statement. Refer to Chapter 4 of DB2 SQL Reference for rules for each argument of the scalar function function-name.

Destination:  42815

-173  UR IS SPECIFIED ON THE WITH CLAUSE BUT THE CURSOR IS NOT READ-ONLY

Explanation:  The cursor is not a read-only cursor. WITH UR can be specified only if DB2 can determine that the cursor is read-only.

System Action:  Statement execution fails.

Programmer Response:  If the cursor is intended to be read-only but is ambiguous, add the FOR FETCH ONLY clause. If the cursor is updateable, change the isolation level specified on the WITH clause.

Destination:  42801

-180  THE DATE, TIME, OR TIMESTAMP VALUE value IS INVALID

Explanation:  The length or string representation of a DATE, TIME, or TIMESTAMP value does not conform to any valid format.

The value can contain one of the following:

- For a host variable, the position number of the input host variable. If the position number cannot be determined, a blank is displayed.
- For a character string constant, the character string constant. The maximum length that is displayed is the length of SQLRRM.
- For a character column, the column name. If the column is a VIEW column and it has a corresponding base column, the VIEW column name is displayed. If the column is a VIEW column but it does not have a corresponding base column, a string of ‘*N’ is displayed.

Otherwise, value is a string of ‘*N’.

System Action:  The statement cannot be executed.
Programmer Response: Correct the program to ensure the specified value conforms to the syntax of DATE, TIME, and TIMESTAMP. Refer to Chapter 3 of DB2 SQL Reference for a list of valid DATE and TIME formats.

Destination: 22007

-181 THE STRING REPRESENTATION OF A DATETIME VALUE IS NOT A VALID DATETIME VALUE

Explanation: The string representation of a datetime is not in the acceptable range or is not in the correct format. The proper ranges for datetime values are as follows:

Table 2.

<table>
<thead>
<tr>
<th>Datetime</th>
<th>Numeric Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Years</td>
<td>0001 to 9999</td>
</tr>
<tr>
<td>Months</td>
<td>1 to 12</td>
</tr>
<tr>
<td>Days</td>
<td>1 to 30</td>
</tr>
<tr>
<td>February (month 2)</td>
<td>1 to 28 (Leap year 1 to 29)</td>
</tr>
<tr>
<td>January, March, May, July, August, October, December (months 1, 3, 5, 7, 8, 10, 12)</td>
<td>1 to 31</td>
</tr>
<tr>
<td>Hours</td>
<td>0 to 24 (If hour is 24, other parts of time values are zeroes. If hour is USA, maximum hour is 12.)</td>
</tr>
<tr>
<td>Minutes</td>
<td>0 to 59</td>
</tr>
<tr>
<td>Seconds</td>
<td>0 to 59</td>
</tr>
<tr>
<td>Microseconds</td>
<td>0 to 999999</td>
</tr>
</tbody>
</table>

System Action: The statement cannot be executed.

Programmer Response: Check whether the value is within the valid range and is in the proper format. Refer to Chapter 3 of DB2 SQL Reference for information on string data formats.

Destination: 22007

-182 AN ARITHMETIC EXPRESSION WITH A DATETIME VALUE IS INVALID

Explanation: The specified arithmetic expression contains an improperly used datetime value or labeled duration.

System Action: The statement cannot be executed.

Programmer Response: Correct the indicated arithmetic expression.

Destination: 42816

-183 AN ARITHMETIC OPERATION ON A DATE OR TIMESTAMP HAS A RESULT THAT IS NOT WITHIN THE VALID RANGE OF DATES

Explanation: The result of an arithmetic operation is a date or timestamp that is not within the valid range of dates which are between 0001-01-01 and 9999-12-31.

System Action: The statement cannot be executed.

Programmer Response: Examine the SQL statement to see if the cause of the problem can be determined. The problem may be data-dependent, in which case it will be necessary to examine the data that was processed at the time the error occurred.

Destination: 22008

-184 AN ARITHMETIC EXPRESSION WITH A DATETIME VALUE CONTAINS A PARAMETER MARKER

Explanation: The specified arithmetic expression contains a parameter marker improperly used with a datetime value.

System Action: The statement cannot be executed.

Programmer Response: Correct the indicated arithmetic expression.

Destination: 42610

-185 THE LOCAL FORMAT OPTION HAS BEEN USED WITH A DATE OR TIME AND NO LOCAL EXIT HAS BEEN INSTALLED

Explanation: The local format option has been used with a datetime value and no datetime exit has been installed. This may occur if the LOCAL DATE LENGTH or LOCAL TIME LENGTH on the Installation Application Programming Defaults Panel indicated that an exit for datetime was supplied, but in fact the exit supplied by DB2 was not replaced. This may also occur if the datetime exit was replaced and the corresponding LOCAL DATE LENGTH or LOCAL TIME LENGTH on the Installation Application Programming Defaults Panel was not set to a nonzero value.

System Action: The statement cannot be executed.

Programmer Response: Contact the system programmer about installation of the date or time exit.

Destination: 57008

-186 THE LOCAL DATE LENGTH OR LOCAL TIME LENGTH HAS BEEN INCREASED AND EXECUTING PROGRAM RELIES ON THE OLD LENGTH

Explanation: The local format option has been used with a datetime value and DB2 has discovered that the datetime exit routine has been changed to produce a longer local format.

System Action: The statement cannot be executed.

Programmer Response: If the statement receiving this error is embedded in the application program, then a REBIND command must be issued for the application plan. If the statement was dynamic SQL, then the statement can be reentered.

Destination: 22505

-187 A REFERENCE TO A CURRENT DATE/TIME SPECIAL REGISTER IS INVALID BECAUSE THE MVS TOD CLOCK IS BAD OR THE MVS PARMTZ IS OUT OF RANGE

Explanation: DB2 has encountered an invalid time-of-day (TOD) clock. The user referenced one of the special registers: CURRENT DATE, CURRENT TIME, CURRENT TIMESTAMP, or CURRENT TIMEZONE. If the user referenced CURRENT TIMEZONE, the MVS parameter PARMTZ was out of range.

System Action: The statement cannot be executed.
Programmer Response: For CURRENT TIMEZONE, check that the MVS parameter PARMTZ is between −24 and +24 hours. For the other CURRENT special registers, check that the MVS TOD clock has been set correctly.

Destination: 22506

-188 THE STRING REPRESENTATION OF A NAME IS INVALID

Explanation: The host variable referenced in the DESCRIBE statement does not contain a valid string representation of a name. One of the following error conditions has occurred.

- The first byte of the variable is a period or a blank.
- The number of identifiers is greater than 3.
- An identifier is too long.
- A period not contained in a delimited identifier is followed by a period or a blank.
- A delimited identifier is followed by a character other than a period or a blank.
- A delimited identifier is not terminated by a quotation mark.

System Action: The statement cannot be executed.

Programmer Response: Correct the value of the host variable so that it is a valid string representation of a name.

Destination: 22503

-189 CCSID ccsid IS UNKNOWN OR INVALID FOR THE DATA TYPE OR SUBTYPE

Explanation: To determine the subtype of an input host variable or result column, the SYSTRINGS catalog table was accessed with the specified CCSID and:

- The CCSID is not a value of either INCCSID or OUTCCSID, or
- The TRANSTYPE column classifies the CCSID as GRAPHIC rather than CHARACTER, or
- A graphic CCSID has not been specified on your system.

This error can occur when SYSTRINGS is accessed with a pair of CCSIDs that determine if a translation is defined for the pair. In this case, the error is the inconsistency between the data type of a string and the TRANSTYPE classification of its CCSID (one is GRAPHIC and the other is CHARACTER).

This error can also occur when a CCSID specified in DECP does not exist as a value in the INCCSID or OUTCCSID columns of SYSTRINGS.

Another reason this error can occur is that you may be using one of the graphic built-in functions but a graphic CCSID was not specified during system installation.

System Action: The statement cannot be bound or executed.

Programmer Response: Ensure that the CCSID is valid and consistent with the data type of the string. If a valid CCSID is not listed in a built-in row of SYSTRINGS, it can be defined by inserting a user-provided row. If a valid CCSID is missclassified in a user-provided row, that row can be updated to correct the mistake. Refer to the appendices of DB2 Installation Guide for more information on CCSIDs and to DB2 SQL Reference for more information on the SYSTRINGS catalog table.

If a graphic CCSID had not been specified at system installation, update your DECP to include a graphic CCSID and recycle your DB2.

Destination: 22522

-190 ATTRIBUTES OF COLUMN column-name IN TABLE table-name ARE NOT COMPATIBLE WITH THE EXISTING COLUMN

Explanation: The attributes specified for the column of the specified table in an ALTER statement are not compatible with the attributes of the existing column. Either the data type or length is not valid:

- The new altered length for the column is of different length than the current length of the column.
- The existing column is not a VARCHAR data type.

System Action: The ALTER statement cannot be executed.

Programmer Response: Specify attributes that are compatible with the existing column.

Destination: 42837

-191 A STRING CANNOT BE USED BECAUSE IT IS INVALID MIXED DATA

Explanation: The operation required the translation of a mixed data character string to a different coded character set. The string could not be translated because it does not conform to the rules for well-formed mixed data. For example, the string contains EBCDIC shift codes that are not properly paired.

System Action: The statement cannot be executed.

Programmer Response: If the string contains the intended information, the description of the column or host variable should be changed from MIXED DATA to BIT or SBCS DATA. If the description of the column or host variable is correct, the string is the problem and it must be changed to conform to the rules for well-formed mixed data. For more information about well-formed MIXED DATA refer to Chapter 3 of DB2 SQL Reference.

Destination: 22504

-197 QUALIFIED COLUMN NAMES IN ORDER BY CLAUSE NOT PERMITTED WHEN UNION OR UNION ALL SPECIFIED

Explanation: A SELECT statement that specifies both the union of two or more tables and the ORDER BY clause cannot use qualified column names in the ORDER BY clause.

Programmer Response: Change the statement so that qualified names are not necessary in the ORDER BY clause.

System Action: The statement is not executed.

Destination: 42877

-198 THE OPERAND OF THE PREPARE OR EXECUTE IMMEDIATE STATEMENT IS BLANK OR EMPTY

Explanation: The operand (host variable or literal string) that was the object of the PREPARE or EXECUTE IMMEDIATE statement either contained all blanks or was an empty string. A DBRM built in Version 2 Release 3 cannot be used on a Version 2 Release 2 system if the distributive functions were used. If this error appears on Version 2 Release 2 and the DBRM was built on Version 2 Release 3, the program needs to be precompiled again to correct the problem.

System Action: The statement cannot be executed.
Programmer Response: Correct the logic of the application program to ensure that a valid SQL statement is provided in the operand of the PREPARE or EXECUTE IMMEDIATE statement before that statement is executed.

Destination: 42617

-199 ILLEGAL USE OF KEYWORD keyword. TOKEN token-list WAS EXPECTED

Explanation: A syntax error was detected in the statement at the point where the keyword 'keyword' appears.

As an aid to the programmer, a partial list of valid tokens is provided in SQLERRM as 'token-list'. Only those tokens that will fit are listed. Some tokens in the list might not be valid in statements to be executed by DB2; those tokens are valid for sending to other database management systems.

System Action: The statement cannot be executed.

Programmer Response: Examine the statement in the area of the indicated keyword. A colon or SQL delimiter might be missing.

Destination: 42601

-203 A REFERENCE TO COLUMN column-name IS AMBIGUOUS

Explanation: An unqualified column name is ambiguous if more than one table or view identified in the FROM clause has a column with that name, or if more than one column of a nested table expression has that name.

A qualified column name is ambiguous only if the qualifier is the correlation name for a nested table expression and the column name is not unique.

A reference to a column of the triggering table in a CREATE TRIGGER statement is ambiguous if it does not use the correlation name to indicate if it refers to the old or new transition variable.

System Action: The statement cannot be executed.

Programmer Response: If the problem is caused by a nonunique column name in a nested table expression, change the nested table expression so that the column name is unique. If the problem is caused by the use of an unqualified name, qualify it with a table, view, or correlation name.

Destination: 42702

-204 name IS AN UNDEFINED NAME

Explanation: A routine was invoked. The routine invocation was not accepted because of DB2 reason code rc.

name The name of the routine that was invoked.

rc The DB2 reason code describing the cause of the failure. Possible values are: 00E79000, 00E79001, 00E79002, 00E79003, 00E79004, 00E79005, 00E79006, 00E79007, 00E79008, 00E7900C.

System Action: The statement cannot be executed.

Programmer Response: Verify that the object name was correctly specified in the SQL statement, including any required qualifiers. If it is correct, ensure that the object exists in the system before resubmitting the statement.

Destination: 42703

For missing a data type or function in the SOURCE clause, it may be that the object does not exist, OR it may be that the object does exist in some schema, but the schema is not present in your current path.

Destination: 42704

-205 column-name IS NOT A COLUMN OF TABLE table-name

Explanation: No column with the specified 'column-name' occurs in the table or view 'table-name'.

System Action: The statement cannot be executed.

Programmer Response: Verify that the column and table names are specified correctly (including any required qualifiers) in the SQL statement.

Destination: 42703

-206 column-name IS NOT A COLUMN OF AN INSERTED TABLE, UPDATED TABLE, OR ANY TABLE IDENTIFIED IN A FROM CLAUSE, OR IS NOT A COLUMN OF THE TRIGGERING TABLE OF A TRIGGER

Explanation: This return code is used to report one of the following errors:

- In the case of an INSERT or UPDATE statement, the specified column is not a column of the table or view that was specified as the object of the insert or update.

- In the case of an INSERT with VALUES clause, there is a column referenced and columns are not allowed in the VALUES clause.

- In the case of a SELECT or DELETE statement, the specified column is not a column of any of the tables or views identified in a FROM clause in the statement.

- There is a correlated reference in the GROUP BY clause in the select list of a subselect, or a correlated reference is not used in a search condition.

- There is an unresolved qualified reference in HAVING.

- For a CREATE TRIGGER statement:
  - A reference is made to a column using an OLD or NEW correlation name. The column name is not defined in the triggering table.
  - The left side of an assignment in the SET transition-variable statement in the triggered action specifies an old transition variable where only a new transition variable is supported or trigger was not created.

System Action: The statement cannot be executed. No data was retrieved, inserted, or updated or the trigger was not created.

Programmer Response: Verify that the column and table names are specified correctly in the SQL statement. In the case of a SELECT statement, check to be sure that all of the required tables were named in the FROM clause.

In the case of a CREATE TRIGGER statement, ensure that only new transition variables are specified on the left side of assignments in the SET transition-variable statement and that any reference to columns of the triggering table are qualified with a transition variable correlation name.

Destination: 42703
-208 THE ORDER BY CLAUSE IS INVALID BECAUSE COLUMN name IS NOT PART OF THE RESULT TABLE

Explanation: The statement is invalid because a column ('name') specified in the ORDER BY list does not appear in the result table (that is, it is not specified in the SELECT-list).
# Only columns in the result table can be used to order that result when the fullselect of the select-statement is not a sub-
# select.

System Action: The statement cannot be executed.

Programmer Response: Correct the syntax of the statement, either by adding the specified column to the result table, or deleting it from the ORDER BY clause. Refer to Chapter 5 of DB2 SQL Reference for information about restrictions on the use of the ORDER BY clause to order the result of an SQL SELECT.

Destination: 42707

-212 name IS SPECIFIED MORE THAN ONCE IN THE REFERENCING CLAUSE OF A TRIGGER DEFINITION

Explanation: The REFERENCING clause of a CREATE TRIGGER statement specified the same name for more than one of the OLD or NEW correlation names or the OLD_TABLE or NEW_TABLE identifiers. name is the name that was specified multiple times.

System Action: The statement cannot be executed. The trigger was not created.

Programmer Response: Change the statement to specify unique names for all transition variables and tables in the REFERENCING clause and resubmit the CREATE TRIGGER request.

Destination: 42712

-214 An expression starting with expression-start in the clause-type clause is not valid. Reason code = reason-code.

Explanation: The expression identified by the first part of the expression expression-start in the clause-type clause is not valid for the reason specified by the reason-code as follows:
• 2 DISTINCT is specified in the select clause and the expression cannot be matched exactly with an expression in the select list. This reason code occurs only when clause-type is ORDER BY.

System Action: The statement cannot be executed.

Programmer Response: Modify the select-statement based on the reason specified by the reason-code as follows:
• 2 Remove DISTINCT from the select clause

Destination: 42822

-219 THE REQUIRED EXPLANATION TABLE table-name DOES NOT EXIST

Explanation: The EXPLAIN statement assumes the existence of the explanation table and it is not defined in the DB2 subsystem as a base table. Refer to Chapter 6 of DB2 SQL Reference for more information.

System Action: The statement cannot be executed.

Programmer Response: Determine whether the required explanation table does exist. If not, create the required table.

Destination: 42704

-220 THE COLUMN column-name IN EXPLANATION TABLE table-name IS NOT DEFINED PROPERLY

Explanation: An error occurred during the insertion of a row into the explanation table. The table is improperly defined for the following reasons:
• A column is missing.
• Columns are defined in the wrong order.
• The table contains an extra column.
• A column description is invalid because of its name, data type, length, or null attributes.

System Action: The statement cannot be executed. The explanation information is not generated.

Programmer Response: Correct the definition of the required explanation table. Refer to Chapter 6 of DB2 SQL Reference for information on defining an explanation table.

Destination: 55002

-221 "SET OF OPTIONAL COLUMNS" IN EXPLANATION TABLE table-name IS INCOMPLETE. OPTIONAL COLUMN column-name IS MISSING

Explanation: The EXPLAIN statement assumes the required explanation table is defined properly. The optional column indicated is not defined in the indicated explanation table. PLAN_TABLEs must have one of several specific formats. The format chosen must be complete, and each column in the PLAN_TABLE definition must be correct for the chosen format. The allowed formats for the PLAN_TABLE are described in Chapter 6 of DB2 SQL Reference.

System Action: The explanation information is not generated.

Programmer Response: Correct the definition of the required explanation table to include all of the optional columns in the chosen format, just the Version 2 Release 2 optional columns, or no optional columns. Refer to Chapter 6 of DB2 SQL Reference for information on defining an explanation table.

Destination: 55002

-229 THE LOCALE locale SPECIFIED IN A SET LOCALE OR OTHER STATEMENT THAT IS LOCALE SENSITIVE WAS NOT FOUND

Explanation: The statement attempted to reference a Locale that is not known or not available to DB2. locale is the locale that was either specified on the SET CURRENT LOCALE statement or the locale that was in effect at the time the Locale access was attempted.
### SQL Return Codes

#### -240  THE PART CLAUSE OF A LOCK TABLE STATEMENT IS INVALID

**Explanation:** The LOCK TABLE statement is invalid for one of the following reasons:
- The table space in which the table resides is not partitioned or does not have the LOCKPART YES attribute, and the PART clause is specified.
- An integer specified in the PART clause does not identify a partition of the table space.

**System Action:** The LOCK TABLE statement cannot be executed.

**Programmer Response:** Determine whether the specified table resides in a partitioned table space defined with LOCKPART YES.
- If it is partitioned and defined with LOCKPART YES, specify a PART clause that identifies the partition you want to lock.
- If it is partitioned but does not have the LOCKPART YES attribute and you want to lock a single partition, use ALTER TABLESPACE to change the LOCKPART attribute to YES.
- If it is not partitioned, do not specify the PART clause.

**Destination:** 428B4

#### -250  THE LOCAL LOCATION NAME IS NOT DEFINED WHEN PROCESSING A THREE-PART OBJECT NAME

**Explanation:** A three-part object name (table, view, or alias) cannot be used until the local location name is defined.

**System Action:** Install or reinstall the DB2 distributed data facility (DDF) with a registered location name for local DB2.

**Programmer Response:** Define the local location name and then retry the function.

**Destination:** 42718

#### -291  TOKEN name IS NOT VALID

**Explanation:** A location name cannot contain alphabetic extenders. (The standard alphabetic extenders in the United States are #, @, $.)

**System Action:** The statement cannot be executed.

**Programmer Response:** Correct the name and reissue the statement.

**Destination:** 42602

#### -300 THE STRING CONTAINED IN HOST VARIABLE OR PARAMETER position-number IS NOT NUL-TERMINATED

**Explanation:** A host variable or parameter is invalid. Its entry in the SQLDA is indicated by position-number. The host variable or parameter is a C string variable that is one of the following:
- Used as an input parameter to a stored procedure or function.
- Returned as an output parameter from a stored procedure or function.
- Referenced as an input variable in an embedded SQL statement.
- Used to provide a value for a parameter marker of a dynamic SQL statement.

If the data type of the variable is character string, it is invalid because it does not include X'00'. If the data type of the variable is graphic string, it is invalid because it does not include X'0000'.

**System Action:** The statement cannot be executed.

**Programmer Response:** Append a NUL-terminator to the end of the string.

**Destination:** 22024

#### -301  THE VALUE OF INPUT HOST VARIABLE OR PARAMETER position-number CANNOT BE USED AS SPECIFIED BECAUSE OF ITS DATA TYPE

**Explanation:** DB2 received data that could not be used as specified in the statement because its data type is incompatible with the requested operation.
- The position-number identifies either the host variable number (if the message is issued as a result of an INSERT, UPDATE, DELETE, SELECT, VALUE INTO, or SET assignment statement), or the parameter number (if the message is issued as the result of a CALL statement, or the invocation of a function).

**System Action:** The statement cannot be executed.

**Programmer Response:** Correct the application program, function or stored procedure. Ensure that the data type of the indicated input host variable or parameter in the statement is compatible with the way it is used.

**Destination:** 42895
-302  THE VALUE OF INPUT VARIABLE OR PARAMETER NUMBER position-number IS INVALID OR TOO LARGE FOR THE TARGET COLUMN OR THE TARGET VALUE

Explanation: DB2 received data that was invalid or too large to fit in the corresponding column of the table or the corresponding target value. The position-number identifies either the host variable number (if the message is issued as a result of an INSERT, UPDATE, DELETE, SELECT, VALUES INTO, or SET assignment statement), or the parameter number (if the message is issued as the result of a CALL statement or the invocation of a function).

One of the following occurred:

- The column is defined as a string and the host variable or parameter contains a string that is too long for the column.
- The column is defined as numeric and the host variable or parameter contains a numeric value too large for the definition of the column.
- The host variable is defined as decimal, but contains invalid decimal data.
- The target value is a string constant and the host variable or parameter contains a string that is too long for the target value.
- The target value is a numeric constant and the host variable or parameter contains a numeric value that is too large for the target value.

System Action: The statement cannot be executed.

Programmer Response: Correct the application program, function or stored procedure. Check the column type and length of the value or the data type and contents of the input host variable or parameter position-number. Ensure that the value of the host variable or parameter will fit in the column or contains valid decimal data. Valid decimal data is a System/370 packed decimal number.

Destination: 22003 if number too large for target; 22001 otherwise.

-303  A VALUE CANNOT BE ASSIGNED TO OUTPUT HOST VARIABLE NUMBER position-number BECAUSE THE DATA TYPES ARE NOT COMPARABLE

Explanation: A CALL, FETCH, SELECT, VALUES INTO, or SET assignment statement with a host variable list or structure in position number position-number failed because the host variable with data type data-type2 was not large enough to hold the retrieved value with data type data-type1.

System Action: The statement cannot be executed. No data was retrieved. If the statement was a FETCH, the cursor remains open.

Programmer Response: Verify that table definitions are current, and that the host variable has the correct data type. See the explanation for SQLCODE -405 for ranges of SQL data types.

Destination: 22003

-305  THE NULL VALUE CANNOT BE ASSIGNED TO OUTPUT HOST VARIABLE NUMBER position-number BECAUSE NO INDICATOR VARIABLE IS SPECIFIED

Explanation: A FETCH, SELECT, VALUES INTO, or SET assignment statement resulted in the retrieval of a null value to be inserted into the output host variable, designated by entry number ’position-number’ of the output SQLDA, for which no indicator variable was provided. An indicator variable must be supplied if a column returns a null value.

System Action: The statement cannot be executed. No data was retrieved.

Programmer Response: Examine the definition of the table that is the object of the statement and correct the application program to provide indicator variables for all host variables into which null values can be retrieved. This includes host variables for columns which can contain null values and host variables which receive the results of column functions whose result table could be empty.

Destination: 22002

-309  A PREDICATE IS INVALID BECAUSE A REFERENCED HOST VARIABLE HAS THE NULL VALUE

Explanation: The statement could not be processed because a host variable appearing in a predicate such as

```
column-name = host-variable
```

had the NULL value. Such a predicate is not permitted when the host variable contains the NULL value even though the object column might contain nulls.

System Action: The statement cannot be executed.

Programmer Response: Rebind the plan or package containing the statement. The condition described is not an error in DB2 Version 2 Release 3 and later releases.

Destination: 22512
-310  DECIMAL HOST VARIABLE OR PARAMETER NUMBER CONTAINS NON-DECIMAL DATA

Explanation:  DB2 received nondecimal data from either an application (in the form of a host variable), function or a stored procedure (in the form of a parameter that was passed to or from function or a stored procedure).

number  Identifies either the host variable number (if the message is issued as a result of an INSERT, UPDATE, DELETE, SELECT, VALUES INTO, or SET assignment statement statement), or the parameter number (if the message is issued as the result of the invocation of a function, or a CALL statement).

System Action:  The statement cannot be executed.

Programmer Response:  Correct the application program or stored procedure. Ensure that all decimal variables or parameters contain valid System/370 packed decimal numbers.

Destination:  22023

-311  THE LENGTH OF INPUT HOST VARIABLE NUMBER position-number IS NEGATIVE OR GREATER THAN THE MAXIMUM

Explanation:  When evaluated, the length specification for input host string variable, whose entry in the SQLDA is indicated by position-number, was negative or greater than the maximum.

System Action:  The statement cannot be executed.

Programmer Response:  Correct the program to ensure that the lengths of all host string variables are not negative or that they are not greater than the maximum allowed length.

Destination:  22501

-312  variable-name IS AN UNDEFINED OR UNUSED HOST VARIABLE OR IS USED IN A DYNAMIC SQL STATEMENT OR A TRIGGER DEFINITION

Explanation:  The host variable variable-name appears in the SQL statement, but:

•  The SQL statement is a prepared statement, or
•  The attributes of the variable are inconsistent with its usage in the static SQL statement, or
•  The variable is not declared in the application program or
•  The variable appeared in one of the triggered SQL statements in a CREATE TRIGGER statement.

System Action:  The statement cannot be executed.

Programmer Response:  Verify that

•  The variable name is spelled properly in the SQL statement.
•  The variable is allowed in the SQL statement.
•  The application program contains a declaration for that variable.
•  The attributes of the variable are compatible with its use in the statement.

Destination:  42618

-313  THE NUMBER OF HOST VARIABLES SPECIFIED IS NOT EQUAL TO THE NUMBER OF PARAMETER MARKERS

Explanation:  The number of host variables specified in the EXECUTE or OPEN statement is not the same as the number of parameter markers (question marks) appearing in the prepared SQL statement.

System Action:  The statement cannot be executed.

Programmer Response:  Correct the application program so that the number of host variables specified in the EXECUTE or OPEN statement is the same as the number of parameter markers appearing in the prepared SQL statement. The # DESCRIPT INPUT SQL statement can be used to determine the expected number of input parameter markers.

Destination:  07001

-314  THE STATEMENT CONTAINS AN AMBIGUOUS HOST VARIABLE REFERENCE

Explanation:  A host variable used in the statement has been defined more than once in this application program causing confusion as to which host variable defined should be used.

System Action:  The statement cannot be executed.

Programmer Response:  Make the host variable unique or use qualifications to indicate which host variable definition is to be used.

Destination:  42714

-327  THE ROW CANNOT BE INSERTED BECAUSE IT IS OUTSIDE THE BOUND OF THE PARTITION RANGE FOR THE LAST PARTITION

Explanation:  When a row is inserted, the calculated partition key value for the new row must be within the bounds of a partition (as specified in the VALUES clause of the CREATE INDEX statement).

System Action:  The statement cannot be executed.

Programmer Response:  Correct the statement to specify a value for the partition key that is within the bounds of the last partition of the partitioned table space.

Destination:  22525

-330  A STRING CANNOT BE USED BECAUSE IT CANNOT BE TRANSLATED. REASON reason-code, CHARACTER code-point, HOST VARIABLE position-number

Explanation:  A translation error occurred during the translation of a string to a different coded character set. The type of error is indicated by the reason-code.

8  Length exception (for example, expansion required for PC MIXED data exceeds the maximum length of the string).
12  Invalid code point (for example, use of the ERRORBYTE option of SYSSTRINGS).
16  Form exception (for example, invalid MIXED data).
20  Translate procedure error (for example, an exit set the length control field of the string to an invalid value).
24  SBCS character found in string contained in a wchar_t host variable.
If the reason-code is 12, code-point is the invalid code point. Otherwise, code-point is either blank or an additional reason-code returned by an exit. If the string is the value of an input host variable, the position-number is the ordinality of the variable in the SQLDA. If the string is not the value of a host variable, the position-number is blank.

System Action: The statement cannot be executed.

Programmer Response: Take one of the following actions based on the reason-code

- If the reason-code is 8, extend the maximum length of the host variable to allow for the expansion that occurs when the string is translated.
- If the reason-code is 12, change the translate table to accept the code-point or the data to eliminate the code-point.
- If the reason-code is 16 and the string is described as MIXED data, either change its description or the string to conform to the rules for well-formed mixed data.
- If the reason-code is 20, correct the translate procedure.
- If the reason-code is 24, delete the SBCS character from the graphic string.

Destination: 22021

---

-331 A STRING CANNOT BE ASSIGNED TO A HOST VARIABLE BECAUSE IT CANNOT BE TRANSLATED. REASON reason-code, CHARACTER code-point, POSITION position-number

Explanation: The operation required the translation of a string to the coded character set of the host variable and a translation error occurred. The type of error is indicated by the 'reason-code'.

- If the reason-code is 8, the length exception (e.g., expansion translation required for PC MIXED data exceeds the maximum length of the string).
- If the reason-code is 12, either change the translate table to accept the code-point or the data to eliminate the code-point.
- If the reason-code is 16, the string is described as MIXED data. Either change its description or the string to conform to the rules for well-formed mixed data.
- If the reason-code is 20, correct the translate procedure.
- If the reason-code is 24, delete the SBCS character from the graphic string.

Destination: 22021

---

-332 SYSSTRINGS DOES NOT DEFINE A TRANSLATION FROM CCSID ccssid TO ccssid

Explanation: The operation required a translation of a string to a different coded character set, but the particular translation is not described in the SYSSTRINGS catalog table nor could translation be externalized. The first ccssid identifies the coded character set of the string and the second ccssid identifies the coded character set to which it must be translated.

System Action: The statement cannot be executed.

Programmer Response: If the CCSIDs are correct, the only corrective action is to provide for the translation by inserting a row into SYSSTRINGS. For an SBCS translation, the row must contain a translate table or the name of a user-provided translate procedure. For a DBCS translation, the row must contain the name of a user-provided translate procedure. Refer to Chapter 3 of DB2 SQL Reference for more information on coded character set.

Destination: 57017

---

-333 THE SUBTYPE OF A STRING VARIABLE IS NOT THE SAME AS THE SUBTYPE KNOWN AT BIND TIME AND THE DIFFERENCE CANNOT BE RESOLVED BY TRANSLATION

Explanation: The CCSID in the run time SQLDA is inconsistent with the bind time subtype of the host variable or parameter marker. Either the run time description is BIT and the bind time description was not BIT, or the run time description is not BIT and the bind time description was BIT.

System Action: The statement cannot be executed.

Programmer Response: Change the CCSID in the SQLDA so that the subtype of the host variable is consistent with the bind time subtype of the host variable or parameter marker. If the input data in error is a parameter marker, you can use the DESCRIBE INPUT SQL statement to determine the expected SOLTYPE, SOLLEN and CCSID expected. Refer to Chapter 3 of DB2 SQL Reference for more information on coded character set.

Destination: 56010

---

-338 AN ON CLAUSE IS INVALID

Explanation: This return code reports a violation of one of the following:

- One expression of the predicate must only reference columns of one of the operand tables of the associated join operator, full join, and the other expression of the predicate must only reference columns of the other operand table.
- A VALUE or COALESCE function is allowed in the ON clause only when the join operator is a FULL OUTER JOIN or FULL JOIN.
- An operator other than '=' is not allowed in a FULL OUTER JOIN or FULL JOIN.
- A subquery is not allowed in the ON clause.

System Action: The statement cannot be executed.

Programmer Response: Correct the syntax so that it doesn't violate any of the above items within the ON clause.

Destination: 42972
-339 THE SQL STATEMENT CANNOT BE EXECUTED FROM AN ASCII BASED DRDA APPLI-

EXPLANATION: The application is connected to a DB2 Version 2 Release 3 database server. The SQL statement is using an alias or three-part name, which refers to another DB2 subsystem that is at the Version 2 Release 2 level. DB2 Version 2 Release 2 does not support character conversion. Since the execution of SQL statements from an ASCII DRDA requester to an EBCDIC Version 2 Release 2 DB2 server could require character conversion, access to the Version 2 Release 2 DB2 is denied for data integrity reasons.

SYSTEM ACTION: The statement cannot be executed.

PROGRAMMER RESPONSE: Remove statements from the application that resolve to a DB2 Version 2 Release 2 subsystem.

SYSTEM PROGRAMMER RESPONSE: If the application must refer to the Version 2 Release 2 subsystem data, the Version 2 Release 2 DB2 subsystem must be migrated to Version 2 Release 3 where character conversion is supported.

DESTINATION: 56082

-350 INVALID SPECIFICATION OF A LARGE OBJECT COLUMN

EXPLANATION: The ALTER TABLE, CREATE TABLE, or CREATE INDEX statement is invalid for one of the following reasons:

- A LOB column cannot be added to a temporary table.
- A LOB column cannot be added to a table defined with an EDITPROC.
- The PRIMARY KEY clause cannot specify a LOB column as a column of the primary key.
- The referential-constraint clause cannot specify a LOB column as a column of a foreign key.
- The CREATE INDEX statement cannot name a LOB column as a column of the index key.
- A LOB column cannot be specified in a references clause.

SYSTEM ACTION: The statement cannot be executed.

PROGRAMMER RESPONSE: Correct the syntax and resubmit the statement.

DESTINATION: 42962

-351 AN UNSUPPORTED SQLTYPE WAS ENCOUNTERED IN POSITION position-number OF THE SELECT-LIST

EXPLANATION: position-number is the position of the first element in the SQLDA with an unsupported data type. Either the application requestor or the application server does not have support for this type. This error can only occur in a client/server environment.

SYSTEM ACTION: The statement cannot be executed.

PROGRAMMER RESPONSE: Change the statement to exclude the unsupported data type. For a select statement, remove the names of any columns in the select-list with the unsupported data types.

DESTINATION: 56084

-352 AN UNSUPPORTED SQLTYPE WAS ENCOUNTERED IN POSITION position-number OF THE INPUT-LIST

EXPLANATION: The input SQLDA for an OPEN, EXECUTE, FETCH, or CALL statement contains an unsupported SQLTYPE for the parameter in position position-number. position-number is the position of the first element in the SQLDA with an unsupported data type. Either the application requestor or the application server does not have support for this data type. This error can only occur in a client/server environment.

SYSTEM ACTION: The statement cannot be executed.

PROGRAMMER RESPONSE: Change the SQLDA to exclude the unsupported data type.

DESTINATION: 56084

-355 A LOB COLUMN IS TOO LARGE TO BE LOGGED

EXPLANATION: One of the following has occurred:

- a CREATE TABLE statement for an auxiliary table stores a BLOB, CLOB or DBLOB column whose length exceeds 1 gigabyte but whose associated LOB table space was defined with the LOG YES attribute
- an ALTER TABLESPACE statement of a LOB table space specifies the LOG YES clause but the auxiliary table in the LOG table space stores a BLOB or CLOB column whose length exceeds 1 gigabyte or a DBLOB column whose length exceeds 500 megabyte characters

SYSTEM ACTION: The statement cannot be executed.

PROGRAMMER RESPONSE: Either change the attribute of the LOB table space to LOG NO or drop the base table, and recreate it with columns of an acceptable length for logging.

DESTINATION: 42993

# -359 THE RANGE OF VALUES FOR THE IDENTITY COLUMN IS EXHAUSTED

# EXPLANATION: An INSERT statement was issued against a table with an identity column; however all allowable values for the identity column data type have already been assigned.

SYSTEM ACTION: The statement cannot be executed.

PROGRAMMER RESPONSE: Redefine the table to use a data type on the identity column that supports a larger range of values. For example, if SMALLINT is currently specified, change the data type for the identity column to INTEGER.

DESTINATION: 23522

# -372 ONLY ONE ROWID OR IDENTITY COLUMN IS ALLOWED IN A TABLE

# EXPLANATION: An attempt was made to do one of the following:

- Create a table with more than one ROWID column.
- Add a ROWID column to a table that already has one.
- Create a table with more than one identity column.
- Add an identity column to a table that already has one.

SYSTEM ACTION: The statement was not executed.
-373 • -399

Programmer Response: For a CREATE TABLE statement, select only one column to have the row ID data type or the AS IDENTITY attribute. For an ALTER TABLE statement, a ROWID column or identity column already exists for the table. Do not attempt to add another column with the data type row ID or with the AS IDENTITY attribute to the table.

Destination: 428C1

-373 DEFAULT CANNOT BE SPECIFIED FOR IDENTITY COLUMN column-name

Explanation: A DEFAULT clause may not be specified for a column that has been identified as an IDENTITY column.

System Action: The statement cannot be executed.

Programmer Response: Remove the DEFAULT clause and resubmit the statement.

Destination: 42623

-390 THE FUNCTION function-name, SPECIFIC NAME specific-name, IS NOT VALID IN THE CONTEXT IN WHICH IT OCCURS

Explanation: A function resolved to a specific function that is not valid in the context where it is used. If specific-name is an empty string, then the function resolved to the built-in function identified by function-name. Some of the possible situations include:

- A scalar or column function is referenced where only a table function is allowed (such as in the FROM clause of a query).
- A table function is referenced where only a scalar or column function is allowed (such as in an expression, or in a SOURCE clause of a CREATE FUNCTION statement).

System Action: The statement cannot be executed.

Programmer Response: Ensure that the correct function name and arguments are specified and that the SQL path includes the schema where the correct function is defined. You may need to change the function name, arguments, SQL path (using SET CURRENT PATH or the PATH bind option), or change the context in which the function is used. Refer to Chapter 6 of DB2 SQL Reference for information on the use of functions.

Destination: 428D3

-398 A LOCATOR WAS REQUESTED FOR HOST VARIABLE NUMBER position-number BUT THE VARIABLE IS NOT A LOB

Explanation: The application requested that a locator be returned from host variable number position-number. A locator can only be used with LOB data, and the requested data is not a LOB.

System Action: The statement cannot be executed.

Programmer Response: Change the statement to either return LOB data, or change the target host variable to not be a locator.

Destination: 428D2

-399 ATTEMPTED TO INSERT AN INVALID VALUE INTO A ROWID COLUMN

Explanation: When inserting into a table, a value specified for a ROWID column was invalid. Only row ID values previously generated by DB2 are valid.

System Action: The INSERT is not performed.

Programmer Response: Do not attempt to generate any value for insertion into a ROWID column. Insertion into ROWID columns is supported for purposes of Data Propagation, where DB2 has previously generated the row ID values. Only row ID values previously generated by DB2 can be used as values for insertion into a row ID column. Alternatively, insert the row specifying DEFAULT for the ROWID column or remove the ROWID column from the insert column-list.

Destination: 22511
-400  THE CATALOG HAS THE MAXIMUM NUMBER OF USER DEFINED INDEXES
Explanation: Only one hundred user-defined indexes can be created in the catalog database.
System Action: The statement cannot be executed.
Programmer Response: If this index must be created, another user-defined index on the catalog must be dropped. After that index is dropped, this statement can be executed.
Destination: 54027

-401  THE OPERANDS OF AN ARITHMETIC OR COMPARISON OPERATION ARE NOT COMPATIBLE
Explanation: An arithmetic operation appearing within the SQL statement contains a mixture of numeric and non-numeric operands, or the operands of a comparison operation are not compatible.
One reason for this error is that the comparison involves both character and graphic operands. This combination of operands is not allowed.
System Action: The statement cannot be executed.
Programmer Response: Check the data types of all operands to ensure that their data types are comparable and compatible with their usage in the statement.
If all the operands of the SQL statement are correct, then, if a view is being accessed, check the data types of all the operands in the view definition.
Destination: 42818

-402  AN ARITHMETIC FUNCTION OR OPERATOR arith-fop IS APPLIED TO CHARACTER OR DATETIME DATA
Explanation: A nonnumeric operand has been specified for the arithmetic function or operator ‘arith-fop’.
System Action: The statement cannot be executed.
Programmer Response: Examine and correct the syntax of the SQL statement such that all operands of the specified function or operator are numeric.
Destination: 42819

-404  THE SQL STATEMENT SPECIFIES A STRING THAT IS TOO LONG
Explanation: An INSERT, UPDATE, CALL, VALUES INTO, SET, parameter, host variable, or transition variable statement specifies a value that is longer than the maximum length string that can be stored in the indicated column.
System Action: The statement cannot be executed.
Programmer Response: Check the length of the target column, parameter, host variable or transition variable and correct the program or SQL statement so that the length of the string does not exceed that maximum. For example, you could use the SUBSTR function to shorten the string.
Destination: 22001

-405  THE NUMERIC LITERAL literal CANNOT BE USED AS SPECIFIED BECAUSE IT IS OUT OF RANGE
Explanation: The specified numeric literal is not in the proper range.
The proper ranges for SQL values are as follows:
- 5.4E-79 to 7.2E+75 for FLOAT values
- (10^31 -1) to +(10^31 -1) for DECIMAL values
- -2147483648 to 2147483647 for INTEGER values
- -32768 to +32767 for small integer (SMALLINT) values.
System Action: The statement cannot be executed.
Programmer Response: The value of the literal should be reduced to the appropriate size for this data type.
Destination: 42820

-406  A CALCULATED OR DERIVED NUMERIC VALUE IS NOT WITHIN THE RANGE OF ITS OBJECT COLUMN
Explanation: A value derived or calculated during processing of the SQL statement was outside the range of the data type of its object column. This problem might have arisen because either the values occurring in the object column were out of range, or the SQL operation performed was not appropriate for the values in the object column.
System Action: The statement cannot be executed.
Programmer Response: See the explanation of SQLCODE -405 for allowed ranges for numeric data types.
Destination: 22003

-407  AN UPDATE, INSERT, OR SET VALUE IS NULL, BUT THE OBJECT COLUMN column-name CANNOT CONTAIN NULL VALUES
Explanation: One of the following conditions occurred:
- A null insert or update value was specified for a column defined as NOT NULL.
- No insert value was provided for a column that does not have a default value.
- A SET transition variable statement specified a NULL value for column defined as NOT NULL.
- The insert value was DEFAULT, but the object column was declared as NOT NULL without WITH DEFAULT in the table definition. Consequently, a default value of NULL cannot be inserted into that column.
- A null insert value was specified for a ROWID column.
System Action: The statement cannot be executed. The ‘column-name’ might be returned in the SQLCA, depending on the syntax of the SQL statement in which the error was detected.
Programmer Response: Examine the definition of the object table to determine which columns of the table have the NOT NULL attribute or have a type of ROWID, and correct the SQL statement accordingly.
Destination: 23502
-408  THE VALUE IS NOT COMPATIBLE WITH THE DATA TYPE OF ITS TARGET

Explanation: The data type of the value to be assigned to the column, parameter, host variable or transition variable by the SQL statement is incompatible with the declared data type of the assignment target. Both must be:

- Numeric
- Character
- Graphic
- Dates or character
- Times or character
- Timestamps or character
- Row IDs
- The same distinct types

However, dates, times, or timestamps cannot be assigned to a character column that has a field procedure.

This SQLCODE is issued for any statement that fails required assignment rule checking.

System Action: The statement cannot be executed.

Programmer Response: Correct the indicated literal.

Destination: 56040

-412  THE SELECT CLAUSE OF A SUBQUERY SPECIFIES MULTIPLE COLUMNS

Explanation: In the context in which it was used in the SQL statement, the subquery can have only one column specified in its SELECT clause.

System Action: The statement cannot be executed.

Programmer Response: Correct the syntax of the SQL statement. Refer to Chapter 5 of DB2 SQL Reference for information about restrictions on the syntax for subqueries.

Destination: 42823

-413  OVERFLOW OCCURRED DURING NUMERIC DATA TYPE CONVERSION

Explanation: During processing of the SQL statement, an overflow condition arose when converting from one numeric type to another. Numeric conversion is performed according to the standard rules of SQL.

System Action: The statement cannot be processed. No data was retrieved, updated, or deleted.

Programmer Response: Examine the syntax of the SQL statement to determine the cause of the error. If the problem is data-dependent, it might be necessary to examine the data processed at the time of the error.

Destination: 22003

-414  A LIKE PREDICATE IS INVALID BECAUSE THE FIRST OPERAND IS NOT A STRING

Explanation: The data type of the first operand of the LIKE predicate must be a character string or graphic string.

System Action: The statement cannot be executed.

Programmer Response: Respecify the predicate so that the data type of each operand is a character string or a graphic string.

Destination: 42824

-415  THE CORRESPONDING COLUMNS, column-number, OF THE OPERANDS OF A UNION OR A UNION ALL DO NOT HAVE COMPARABLE COLUMN DESCRIPTIONS

Explanation: The column descriptions of corresponding columns of the operands of a UNION or UNION ALL must be comparable. The columns of ordinality ‘column-number’ of the operands in this UNION or UNION ALL do not satisfy this requirement. For columns to be comparable, they must both be either numeric, character, graphic, date, time, or timestamp. They cannot be a mixture of these groups. If corresponding columns have field procedures, they must both have the same field procedure.

System Action: The statement cannot be executed.

Programmer Response: Check the data types of the specified columns and correct the UNION or UNION ALL statement so that all corresponding columns have comparable column descriptions.

Destination: 42825
-416  AN OPERAND OF A UNION CONTAINS A LONG STRING COLUMN  

Explanation: The UNION specified in the SQL statement could not be performed because one of the tables participating in the union contains a long string column (for example, a VARCHAR column with length greater than 255). The operands of a UNION cannot contain long string columns.

System Action: The statement cannot be executed.

Programmer Response: The implied function is not supported by DB2. Refer to Chapter 3 of DB2 SQL Reference for information about restrictions on the manipulation of long string columns.

Destination: 42907

-417  A STATEMENT STRING TO BE PREPARED INCLUDES PARAMETER MARKERS AS THE OPERANDS OF THE SAME OPERATOR  

Explanation: The statement string specified as the object of a PREPARE contains a predicate or expression where parameter markers have been used as operands of the same operator—for example:

? > ?

This syntax is not permitted.

System Action: The statement cannot be executed.

Programmer Response: Correct the logic of the application program so that this syntax error does not occur. Refer to Chapter 6 of DB2 SQL Reference for information about the proper usage of parameter markers within SQL statements to be prepared.

Destination: 42609

-418  A STATEMENT STRING TO BE PREPARED CONTAINS AN INVALID USE OF PARAMETER MARKERS  

Explanation: Parameter markers cannot be used in the SELECT list, as the sole argument of a scalar function, or in a concatenation operation. Parameter markers cannot be used in the string expression of an EXECUTE IMMEDIATE SQL statement.

System Action: The statement cannot be executed.

Programmer Response: Correct the logic of the application program so that this error does not occur. Refer to Chapter 6 of DB2 SQL Reference for information about the proper usage of parameter markers within SQL statements and for EXECUTE IMMEDIATE SQL statement restrictions.

Destination: 42610

-419  THE DECIMAL DIVIDE OPERATION IS INVALID BECAUSE THE RESULT WOULD HAVE A NEGATIVE SCALE  

Explanation: The decimal division is invalid because it will result in a negative scale.

The formula used internally to calculate the scale of the result for decimal division is explained in Chapter 3 of DB2 SQL Reference.

System Action: The statement cannot be executed. No data was retrieved, updated, or deleted.

Programmer Response: Examine the precision and scale of all columns that may have participated in a decimal division. Note that an integer or small integer value may have been converted to decimal for this calculation.

Destination: 42911

-420  THE VALUE OF A CHARACTER STRING ARGUMENT WAS NOT ACCEPTABLE TO THE function-name FUNCTION  

Explanation: A character string argument did not conform to the requirements of the function. For example, a character string passed to the DECIMAL function did not conform to the rules for forming an SQL integer or decimal constant.

System Action: The statement cannot be executed.

Programmer Response: Change the argument value so that it conforms to the requirements of the function as specified in DB2 SQL Reference.

Destination: 22018

-421  THE OPERANDS OF A UNION OR UNION ALL DO NOT HAVE THE SAME NUMBER OF COLUMNS  

Explanation: The operands of a UNION or UNION ALL must have the same number of columns.

System Action: The statement cannot be executed.

Programmer Response: Correct the SQL statement so that there are exactly the same number of columns in each operand.

Destination: 42826

-423  INVALID VALUE FOR LOCATOR IN POSITION position-#  

Explanation: The value specified in a result set locator host variable or a LOB locator host variable specified at position position-# in the locator variable list of the SQL statement does not identify a valid result set locator or LOB locator variable, respectively.

System Action: The statement cannot be executed.

Programmer Response: For a result set locator there are two common causes for the error:

• The host variable used as a result set locator was never assigned a valid result set locator value. Result set locator values are returned by the DESCRIBE PROCEDURE and ASSOCIATE LOCATORS statements. Make sure the value in your host variable is obtained from one of these statements.

• Result set locator values are only valid as long as the underlying SQL cursor is open. If a commit or rollback operation closes an SQL cursor, the result set locator associated with the cursor is no longer valid.

For a LOB locator, some common causes for the error are:

• The host variable used as a LOB locator was never assigned a valid LOB value.

• A commit or rollback operation or an SQL FREE LOCATOR statement freed the locator.

Destination: 0F001
-426  DYNAMIC COMMIT NOT VALID AT AN APPLICATION SERVER WHERE UPDATES ARE NOT ALLOWED

Explanation: An application executing using DRDA protocols has attempted to issue a dynamic COMMIT statement, or a stored procedure has attempted to issue a COMMIT_ON_RETURN, while connected to a location at which updates are not allowed. A dynamic COMMIT or COMMIT_ON_RETURN can be issued only while connected to a location at which updates are allowed.

System Action: The statement cannot be executed. No COMMIT is performed.

Programmer Response: The IMS or CICS protocols should be used to commit work in these environments.

Destination: 2D528

-427  DYNAMIC ROLLBACK NOT VALID AT AN APPLICATION SERVER WHERE UPDATES ARE NOT ALLOWED

Explanation: An application executing using DRDA protocols has attempted to issue a dynamic ROLLBACK statement while connected to a location at which updates are not allowed. A dynamic ROLLBACK may be issued only while connected to a location at which updates are allowed.

System Action: The statement cannot be executed. No ROLLBACK is performed.

Programmer Response: The IMS or CICS protocols should be used to rollback work in these environments.

Destination: 2D529

-430  routine-type routine-name (SPECIFIC NAME specific-name) HAS ABNORMALLY TERMINATED

Explanation: An abnormal termination has occurred while the routine routine-name (stored procedure or function) was in control.

System Action: The statement cannot be executed.

Programmer Response: The stored procedure or function needs to be fixed. Contact the author of the routine or your database administrator. Until it is fixed, the routine should not be used.

Destination: 38503

-433  VALUE value IS TOO LONG

Explanation: The value value required truncation by a system (built-in) cast or adjustment function, which was called to transform the value in some way. The truncation is not allowed where this value is used. The value being transformed is one of the following:

- an argument to a user defined function (UDF)
- an input to the SET clause of an UPDATE statement
- a value being INSERTed into a table

- an input to a cast or adjustment function in some other context.

If value has the ‘for bit data’ subtype, then the value is printed as a hexadecimal string in quotes followed by an X.

System Action: The statement cannot be executed.

Programmer Response: If value is a literal string in the SQL statement, it is too long for its intended use. If value is not a literal string, examine the SQL statement to determine where the transformation is taking place. Either the input to the transformation is too long, or the target is too short. Correct the problem and rerun the statement.

Destination: 22001

-435  AN INVALID SQLSTATE sqlstate IS SPECIFIED IN THE FUNCTION RAISE_ERROR OR IN A SIGNAL SQLSTATE STATEMENT

Explanation: The SQLSTATE specified in the RAISE_ERROR function or specified in a SIGNAL SQLSTATE statement of a trigger definition does not conform to the rules for an application defined SQLSTATE.

System Action: The statement cannot be processed.

Programmer Response: Correct the SQLSTATE specified in the RAISE_ERROR function or SIGNAL statement. The SQLSTATE must be a character string containing exactly 5 characters. It must be of type CHAR defined with a length of 5, or a type VARCHAR defined with a length of 5 or greater. The SQLSTATE value must follow the rules for application-defined SQLSTATEs as follows:

- Each character must be from the set of digits (’0’ through ’9’) or non-accented upper case letters (’A’ through ’Z’).
- The SQLSTATE class (first two characters) cannot be ’00’, ’01’ or ’02’ because these are not error classes.
- If the SQLSTATE class (first two characters) starts with the character ’0’ through ’6’ or ’A’ through ’H’, then the subclass (last three characters) must start with a letter in the range ’I’ through ’Z’.
- If the SQLSTATE class (first two characters) starts with the character ’7’, ’8’, ’9’ or ’I’ through ’Z’, then the subclass (last three characters) can be any of ’0’ through ’9’ or ’A’ through ’Z’.

Destination: 428B3

-438  APPLICATION RAISED ERROR WITH DIAGNOSTIC TEXT: text

Explanation: This error occurred as a result of execution of the RAISE_ERROR function or as a result of the SIGNAL SQLSTATE statement.

text Diagnostic text provided by the invocation of the RAISE_ERROR function or the SIGNAL SQLSTATE statement.

System Action: The statement cannot be processed.

Programmer Response: Use application-provided diagnostic text, if provided, to determine the cause of the error.

Destination: application-defined
-440 NO routine-type BY THE NAME routine-name HAVING COMATIBLE ARGUMENTS WAS FOUND

Explanation: This occurs in a reference to routine (stored procedure or function) routine-name, when DB2 cannot find a function or stored procedure it can use to implement the reference. There are several reasons why this could occur.

- routine-name was either incorrectly specified or does not exist in the database.
- A qualified reference was made, and the qualifier was incorrectly spelled.
- A user's current path does not contain the schema to which the desired function belongs, and an unqualified reference was used.
- The wrong number of arguments were included.
- For functions, the data types of one or more of the arguments is incorrect.
- The routine invoker is not authorized to execute the routine.

System Action: The statement cannot be executed.

Programmer Response: Fix the problem and retry. This could involve a change to the SQL statement, the addition of new routines or a change to the user's current path.

Destination: 42884

-441 INVALID USE OF 'DISTINCT' OR 'ALL' WITH SCALAR FUNCTION function-name

Explanation: The keyword 'DISTINCT' or 'ALL' was detected within parentheses in a reference to function function-name and the function has been resolved as a scalar function. Use of the keyword 'DISTINCT' or 'ALL' with a scalar function is invalid.

System Action: The statement cannot be executed.

Programmer Response: If a scalar function is being used, then remove the keyword 'DISTINCT' or 'ALL'.

If a column function is being used, then there is a problem with function resolution. Check your current path to see if the desired function is in one of the schemas, and also check the SYSIBM.SYSROUTINES catalog for the spelling of the function name and the number and types of parameters.

Destination: 42601

-443 EXTERNAL FUNCTION function-name (SPECIFIC NAME specific-name) HAS RETURNED AN ERROR SQLSTATE WITH DIAGNOSTIC TEXT msg-text

Explanation: An SQLSTATE of the form 38xxx was returned by function function-name, along with message text msg-text.

If the third character is not 5 (i.e. '385xx') then the last 3 characters of the SQLSTATE value were chosen by the function, to indicate the reason of the failure. SQLSTATEs values of the form 385xx are issued by IBM with a different SQLCODE.

System Action: The actions in the external function should be rolled back.

Programmer Response: Contact the author of the function or your database administrator. Until the problem is resolved, the function should not be used.

-444 USER PROGRAM name COULD NOT BE FOUND

Explanation: DB2 received an SQL CALL statement for a stored procedure or an SQL statement containing an invocation of a user-defined function, and found the row in the SYSIBM.SYSROUTINES catalog table associated with the requested procedure name. However, the MVS load module identified in the LOADMOD column of the SYSIBM.SYSROUTINES row could not be found.

name The name of the MVS load module that could not be found

System Action: The statement cannot be executed.

Programmer Response: If the LOADMOD column value in the SYSIBM.SYSROUTINES table is incorrect, use the ALTER FUNCTION or ALTER PROCEDURE statement to correct the value.

If the LOADMOD column value is correct, use the MVS linkage editor to create the required MVS load module in one of the MVS load libraries used by your installation for stored procedures.

# This error can also occur if you are invoking a WLM-managed stored procedure that is not APF authorized, and the DB2 load libraries are not in the STEPLIB concatenation because they are being loaded from LINKLIST. In this case, if you want the stored procedure program to run APF-authorized, link-edit it with AC=1 into an MVS APF authorized library. If you do not want the stored procedure program to run APF authorized, add the DB2 load library to the STEPLIB concatenation of the JCL used to start the WLM-managed address space.

Destination: 42724

-449 CREATE OR ALTER STATEMENT FOR FUNCTION OR PROCEDURE routine-name CONTAINS AN INVALID FORMAT OF THE EXTERNAL NAME CLAUSE OR IS MISSING THE EXTERNAL NAME CLAUSE

Explanation: An error was found in the EXTERNAL NAME clause of the CREATE FUNCTION, CREATE PROCEDURE, ALTER FUNCTION, or ALTER PROCEDURE statement for routine-name, or the clause is needed but was not specified.

The external name must be a short identifier with letters or digits. The first character must be a letter. (This is the MVS naming convention for load modules). A possible cause for this error is the inclusion of a blank in the name.

If the clause is omitted, the external name defaults to function-name. However, for CREATE FUNCTION or CREATE PROCEDURE if the function or procedure name is longer than eight characters then the EXTERNAL NAME clause must be explicitly specified to specify a valid short identifier as the external name.

System Action: The statement cannot be executed.

Programmer Response: Correct the syntax of the SQL statement. Refer to the DB2 SQL Reference for information on the EXTERNAL NAME clause.

Destination: 42878
-450  USER-DEFINED FUNCTION OR STORED PROCEDURE name, PARAMETER NUMBER parameter-name, OVERLAYED STORAGE BEYOND ITS DECLARED LENGTH.

Explanation: Upon return from a specific function name or a stored procedure name, DB2 has detected an overlay storage beyond a parameter's declared length. The parameter number is specified for a stored procedure or function. This is not permitted.

System Action: The statement cannot be executed.

Programmer Response: Contact the author of the function or your database administrator. Until it is fixed, the function should not be used.

Destination: 39501

-451  THE data-item DEFINITION, IN THE CREATE FUNCTION FOR function-name CONTAINS DATA TYPE type WHICH IS NOT APPROPRIATE FOR AN EXTERNAL FUNCTION WRITTEN IN THE GIVEN LANGUAGE

Explanation: An error was made in the data-item part of the CREATE FUNCTION statement for function-name. The CREATE FUNCTION statement contained an invalid type, or it contained a distinct type which is based on the invalid type.

System Action: The statement cannot be executed.

Programmer Response: Correct the statement.

Destination: 42815

-453  THERE IS A PROBLEM WITH THE RETURNS CLAUSE IN THE CREATE FUNCTION STATEMENT FOR function-name

Explanation: A problem casting the result of user-defined function function-name has been identified. The CAST FROM data type is not castable to the RETURNS data type, and it must be. See the SQL Reference for details on casting between data types.

System Action: The statement cannot be executed.

Programmer Response: Change the RETURNS or CAST FROM clause so that the CAST FROM data type is castable to the RETURNS data type.

Destination: 42880

-454  THE SIGNATURE PROVIDED IN THE CREATE FUNCTION STATEMENT FOR function-name MATCHES THE SIGNATURE OF SOME OTHER FUNCTION ALREADY EXISTING IN THE SCHEMA

Explanation: The signature consists of the function name (function-name), the number of parameters defined for the function, and an ordered list of the types of the parameters (without regard to any parameters of the types). In this case there is a function already in the schema and the existing function has the same signature as the function being created. See the SQL Reference for the details on the uniqueness of a function.

System Action: The statement cannot be executed.

-455  IN CREATE FUNCTION FOR function-name, THE SCHEMA NAME schema-name1 PROVIDED FOR THE SPECIFIC NAME does NOT MATCH THE SCHEMA NAME schema-name2 OF THE FUNCTION

Explanation: If the SPECIFIC name is specified as a two part name, the schema-name1 portion must be the same as the schema-name2 portion of the function-name. Note that the schema-name2 portion of function-name may have been specified directly or it may have defaulted to the authorization ID of the statement.

System Action: The statement cannot be executed.

Programmer Response: Correct the statement.

Destination: 42882

-456  IN CREATE FUNCTION FOR function-name, THE SPECIFIC NAME specific-name ALREADY EXISTS IN THE SCHEMA

Explanation: A SPECIFIC name has been explicitly specified as specific-name in the CREATE FUNCTION statement for function-name, but this name already exists as the SPECIFIC name for another function within the schema.

System Action: The statement cannot be executed.

Programmer Response: Choose a new SPECIFIC name.

Destination: 42710

-457  A FUNCTION OR DISTINCT TYPE CANNOT BE CALLED name SINCE IT IS RESERVED FOR SYSTEM USE

Explanation: The user-defined function or distinct type cannot be created or referenced because the name selected is reserved for use by the system. A number of names used as keywords are reserved for system use. These names may not be used as user-defined functions or distinct-type-names, even if they are delimited identifiers. These names are:

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>=</td>
<td></td>
</tr>
<tr>
<td>&lt;=</td>
<td></td>
</tr>
<tr>
<td>&gt;=</td>
<td></td>
</tr>
<tr>
<td>&lt;&gt;</td>
<td></td>
</tr>
<tr>
<td>&lt;=</td>
<td></td>
</tr>
<tr>
<td>&lt;&gt;</td>
<td></td>
</tr>
<tr>
<td>ALL</td>
<td>ANY</td>
</tr>
<tr>
<td>BETWEEN</td>
<td>DISTINCT</td>
</tr>
<tr>
<td>EXCEPT</td>
<td>EXISTS</td>
</tr>
<tr>
<td>FALSE</td>
<td>FOR</td>
</tr>
<tr>
<td>FROM</td>
<td></td>
</tr>
<tr>
<td>IN</td>
<td>IS</td>
</tr>
<tr>
<td>LIKE</td>
<td>MATCH</td>
</tr>
<tr>
<td>NOT</td>
<td></td>
</tr>
<tr>
<td>NULL</td>
<td>ONLY</td>
</tr>
<tr>
<td>OR</td>
<td>OVERLAPS</td>
</tr>
<tr>
<td>SIMILAR</td>
<td></td>
</tr>
<tr>
<td>SOME</td>
<td>TABLE</td>
</tr>
<tr>
<td>TRUE</td>
<td>TYPE</td>
</tr>
<tr>
<td>UNIQUE</td>
<td></td>
</tr>
<tr>
<td>UNKNOWN</td>
<td></td>
</tr>
</tbody>
</table>

The names of built-in data types cannot be used as the name of a distinct type (for example, CHAR).

System Action: The statement is not executed.

Programmer Response: Select a name for the function or distinct type that is not reserved for system use.

Destination: 42939
Explanation: In a reference to function function-name by signature, a matching function could not be found. The problem could be with the data type or some other attributes of a parameter. For some data types there are attributes in addition to data type:

- Length, precision, or scale
  While it is not necessary to specify a length, precision, or scale attribute for a data type, if one is specified then there must be an exact match on the corresponding specification of the parameter for the existing function as defined in SYSPARMS.
  A type of FLOAT(n) does not need to match the defined value for n since 1<=n<=21 means REAL and 22<=n<=53 means DOUBLE. Matching occurs based on whether the type is REAL or DOUBLE.
  However, a match on data type is sufficient.
  To indicate this, an empty set of parentheses must be specified for the data types that allow a specification of length, precision, or scale. For example, assuming a function exists for which a parameter was defined as CHAR(12) on the CREATE FUNCTION statement, a reference to that function by a signature could specify this parameter as either CHAR(12), or CHAR(). The CHAR() syntax provides a way to say 'don't care about length, precision and scale attributes in finding a matching function'.
  - FLOAT() cannot be used since the parameter value indicates different data types (REAL or DOUBLE).

If, however, neither length, precision, scale, or empty parenthesis were specified, then normal default rules apply. For example, a specification of CHAR would result in CHAR(1) as on the CREATE TABLE statement. Furthermore, this implicit specification of length, precision, or scale must exactly match the corresponding specification of the parameter for the existing function as defined in SYSPARMS.
  - Subtype, or encoding scheme
    You do not need to specify the subtype or encoding scheme (CCSID clause) to identify an existing function in the database. However, if a subtype or encoding scheme is specified then there must be an exact match on the corresponding specification of the parameter for the existing function as defined in SYSPARMS.

- Unqualified function names:
  - For ALTER FUNCTION, DROP FUNCTION, COMMENT ON FUNCTION, GRANT and REVOKE statements for EXECUTE on functions, an unqualified function name is implicitly qualified with the statement authorization ID, and this is the schema where the function with the problem can be found.
  - In the SOURCE clause of a CREATE FUNCTION statement, the qualification comes from the SQL path. In this case, there is no matching function in the entire path.

Note: A function cannot be sourced on the COALESCE, NULLIF, RAISE_ERROR, or VALUE built-in functions. Additionally, there are restrictions on the way that you can source on the COUNT, COUNT_BIG, CHAR, and STRIP built-in functions because of some of the keywords that they accept.

System Action: The statement cannot be executed.

Programmer Response: Possible responses include:
- Changing the SQL path to include the correct schema.
- Changing the attributes of the parameters.
- Using a SPECIFIC name to refer to the function instead of a signature.

Destination: 42883

Explanation: The statement contains a CAST with the first operand having a data type of source-data-type to be cast to the data type target-data-type. This is not supported.

Change the data type of either the source or target so that the cast is supported. For predefined (built-in) data types or a cast involving a user-defined distinct type, see the SQL Reference.

System Action: The statement could not be processed.

Programmer Response: Correct the CAST specification to specify a supported combination of source and target types.

Destination: 42846

Explanation: The valid SQLSTATEs that a user-defined function or stored procedure can return are 38xxx (error), 38502 (error) and 01Hxx (warning). User-defined function or stored procedure routine-name returned an invalid SQLSTATE sqlstate, along with message text text. The user-defined function or stored procedure is in error.

System Action: The statement could not be executed.

Programmer Response: The user-defined function or stored procedure needs to be corrected. See your database administrator, or the author of the function to find out the meaning of the warning. The significance of the bad SQLSTATE to the invoking application can be learned from the author of the function.

Destination: 39001

Explanation: DB2 received an SQL CALL statement for a stored procedure. DB2 found the row in the SYSCBMSYSROUTINES catalog table associated with the requested procedure name. However, parameter number was identified in the SYSCBMSYSPARMS table as an OUT or INOUT parameter. A host variable must be supplied on the SQL CALL statement for parameters defined as OUT or INOUT.

number The parameter number from the ORDINAL field in SYSCBMSYSPARMS.

System Action: The statement cannot be executed.
**-470 • -476**

**Programmer Response:** If the SQL CALL statement is coded incorrectly, modify the SQL application to provide an output host variable on the SQL CALL statement.

- If the SYSIBM.SYSROUTINES table contains incorrect information, the DROP PROCEDURE and CREATE PROCEDURE statements must be used to replace the catalog definition for the stored procedure.

**Destination:** 42886

---

**-470**

**SQL CALL STATEMENT SPECIFIED A NULL VALUE FOR INPUT PARAMETER number, BUT THE STORED PROCEDURE DOES NOT SUPPORT NULL VALUES.**

**Explanation:** DB2 received an SQL CALL statement for a stored procedure and found a null value in the incoming parameter list. The stored procedure was defined in the SYSIBM.SYSROUTINES catalog table with PARAMETER_STYLE of GENERAL, which specifies that the routine does not accept null values.

- A call to a stored procedure with a LANGUAGE value of COMPJAVA receives this SQLCODE if an input parameter in the compiled Java stored procedure has a Java base type that cannot be set to a null value.
- number The parameter number from the ORDINAL field in SYSIBM.SYSPARMS.

**System Action:** The statement cannot be executed.

**Programmer Response:** If the stored procedure should not accept null values, change the calling application to provide a nonnull value.

- If the stored procedure should accept null values, use the ALTER PROCEDURE statement to change the PARAMETER STYLE of the stored procedure to be DB2SQL or GENERAL WITH NULLS.

**Destination:** 39004

---

**-471**

**INVOCATION OF FUNCTION OR PROCEDURE name FAILED DUE TO REASON rc**

**Explanation:** A routine was invoked. The routine invocation was not accepted because of DB2 reason code rc.

- name The name of the routine that was invoked.
- rc The DB2 reason code describing the cause of the failure. Possible values are:
  - 00E79001
  - 00E79002
  - 00E79004
  - 00E79006
  - 00E79007
  - 00E79008
  - 00E7900B
  - 00E7900C
  - 00E7900E

**System Action:** The statement cannot be executed. A DSNX9xx message describing the error might be displayed on the MVS system console.

**Programmer Response:** Correct the condition described by the DB2 reason code.

**Destination:** 55023

---

**-472**

**CURSOR cursor-name WAS LEFT OPEN BY EXTERNAL FUNCTION function-name (SPECIFIC NAME specific-name)**

**Explanation:** The function program did not close the specified cursor. Modify the function program so that it closes the cursor.

**System Action:** The statement cannot be executed.

**Programmer Response:** Reissue the statement when desired.

**Destination:** 24517

---

**-473**

**A USER DEFINED DATA TYPE CANNOT BE CALLED THE SAME NAME AS A SYSTEM PREDEFINED TYPE (BUILT-IN TYPE)**

**Explanation:** The name of a data type to be created has an unqualified name that is the same as a system-predefined data type or is BOOLEAN. This is not allowed. Adding delimiters does not make the name valid. The following names are restricted:

- BLOB
- CHARACTER
- CHAR
- CLOB
- COLUMN
- DATE
- DEC
- DECIMAL
- DOUBLE
- FLOAT
- GRAPHIC
- INT
- INTEGER
- NUMERIC
- REAL
- ROWID
- SMALLINT
- TIME
- TIMESTAMP
- VARCHAR
- VARGRAPHIC
- **System Action:** The statement could not be processed.

**Programmer Response:** Correct the statement to use another identifier for the name of the new user-defined type.

**Destination:** 42918

---

**-475**

**THE RESULT TYPE type-1 OF THE SOURCE FUNCTION CANNOT BE CAST TO THE RETURNS TYPE type-2 OF THE USER-DEFINED FUNCTION function-name**

**Explanation:** In order for the CREATE FUNCTION for a sourced user-defined function to be valid, the result type (type-1) of the source function must be castable to the RETURNS type (type-2) of the function being created. There is no supported cast between these data types. See the DB2 SQL Reference for details on casting between data types.

**System Action:** The statement cannot be executed.

**Programmer Response:** Change the RETURNS data type or the SOURCE function identified so that the result type of the SOURCE function is castable to the RETURNS data type.

**Destination:** 42866

---

**-476**

**REFERENCE TO FUNCTION function-name WAS NAMED WITHOUT A SIGNATURE, BUT THE FUNCTION IS NOT UNIQUE WITHIN ITS SCHEMA**

**Explanation:** References to a function without a signature are permitted, but the named function function-name must be unique in its schema and it is not.

- Note also that in the ALTER FUNCTION, DROP FUNCTION, COMMENT ON FUNCTION, GRANT and REVOKE statements for EXECUTE on functions, an unqualified reference is qualified with the statement authorization ID, and this is the schema
where the problem can be found. In the SOURCE clause of a CREATE FUNCTION statement, the qualification comes from the CURRENT PATH. In this case, the first schema in the path containing a function with this name had other functions by the same name.

**System Action:** The statement cannot be executed.

**Programmer Response:** Correct the reference by one of the following:
- completing the signature
- using the SPECIFIC name of the desired function
- changing the CURRENT PATH

**Destination:** 42725

---

**DROP OR REVOKE ON OBJECT TYPE type1 CANNOT BE PROCESSED BECAUSE OBJECT name OF TYPE type2 IS DEPENDENT ON IT**

**Explanation:** The requested action cannot be processed because a dependency exists on this type1. type2 is the type of object that has the dependency on the type1 object involved in the DROP or REVOKE. type2 can be one of the following:
- FUNCTION
- PROCEDURE
- TABLE
- VIEW
- TRIGGER (for the trigger package)
- CHECK CONSTRAINT (object_name contains the table name)
- DEFAULT (object_name contains the table name)

**DROP**
- If type1 is FUNCTION, the dependencies for DROP might be:
  - Another function is sourced on this function.
  - A view uses this function.
  - A trigger package uses this function.
  - A table uses this function in a check constraint or user-defined default.

  The dependency might be on one of the generated cast functions for a distinct type. If type1 is DISTINCT TYPE, the dependencies for DROP might be:
  - A parameter of a function is defined as this distinct type.
  - A column of a table is defined as this distinct type.
  - A parameter of a stored procedure is defined as this distinct type.

- If type1 is PROCEDURE, the dependencies for DROP might be:
  - A trigger definition contains a CALL statement with the name of this stored procedure

**REVOKE**
- If type1 is FUNCTION, the dependencies for REVOKE might be:
  - A function owned by the revokee is sourced on this function.

- A view owned by the revokee uses this function.
- A trigger package owned by the revokee uses this function.
- A table owned by the revokee uses this function in a check constraint or user-defined default.

If type1 is DISTINCT TYPE, the dependencies for REVOKE might be:
- A parameter of a function owned by the revokee is defined as this distinct type.
- A column of a table owned by the revokee is defined as this distinct type.
- A parameter of a stored procedure owned by the revokee is defined as this distinct type.

If type1 is PROCEDURE, the dependencies for REVOKE might be:
- A trigger definition owned by the revokee contains a CALL statement with the name of this stored procedure.

This SQLCODE may also be issued when SYSADM is being revoked. When SYSADM is revoked the cascading of the REVOKE statement may encounter dependencies that prevent the REVOKE from being successfully processed.

**System Action:** The statement cannot be executed.

**Programmer Response:** Remove the dependencies on this object and then reissue the request.

**Destination:** 42893

---

**-480 THE PROCEDURE procedure-name HAS NOT YET BEEN CALLED**

**Explanation:** The procedure identified in a DESCRIBE PROCEDURE or an ASSOCIATE LOCATORS statement has not yet been called within the application process or the procedure has been called, but an explicit or implicit commit occurred before the statement.

**System Action:** The statement cannot be executed.

**Programmer Response:** Correct the statements so that the exact syntax used to specify the procedure name on the CALL statement be the same as that on the ASSOCIATE LOCATOR and/or DESCRIBE PROCEDURE. If an unqualified name is used to CALL the procedure, the 1-part name must also be used on the other statements. If the CALL statement is made with a 3-part name, and the current server is the same as the location in the 3-part name, the ASSOCIATE LOCATOR or DESCRIBE procedure can omit the location. Rerun the statements.

**Destination:** 51030

---

**-482 THE PROCEDURE procedure-name RETURNED NO LOCATORS**

**Explanation:** The procedure identified in an ASSOCIATE LOCATORS statement returned no result set locators.

**System Action:** The statement cannot be executed.

**Programmer Response:** Determine if result set locators are returned from the identified procedure by using the DESCRIBE PROCEDURE statement.

**Destination:** 51030
-483  IN CREATE FUNCTION FOR function-name
STATEMENT, THE NUMBER OF PARAMETERS
DOES NOT MATCH THE NUMBER OF PARAM-
ETERS OF THE SOURCE FUNCTION

Explanation: An attempt is being made to CREATE a user-
defined function function-name which is sourced on another
function. One of the following situations has been identified:

- The SOURCE clause uses a function-name (input param-
  eter list) to identify the source function, and the number of
types in the list is different from the number of parameters of
the function being created.
- The SOURCE clause uses different syntax to identify the
  source function, and the number of types of that function is
different from the number of parameters of the function
being created.

System Action: The statement cannot be executed.

Programmer Response: The number of parameters for the
SOURCE function and for the function being created must be
the same. The identification of the SOURCE function needs to
be changed to:

- fix the input parameter list
- correct the function name or function specific name to
  identify the proper function.

It is also possible that the current path needs to be corrected
in order for correct function resolution to occur.

Destination: 42885

-487  object-type object-name ATTEMPTED TO
EXECUTE AN SQL STATEMENT WHEN THE
DEFINITION OF THE FUNCTION OR PROCE-
DURE DID NOT SPECIFY THIS ACTION

Explanation: A user-defined function or stored procedure
object-name was invoked and attempted to execute SQL state-
ments, but the function or procedure was created with the NO
SQL option.

# In an environment of nested functions and procedures, the
# SQL option in effect is the most restrictive one that has been
# specified in the nested hierarchy of functions an procedures.
# The SQL data access option in effect does not allow for modi-
# fying data.

System Action: The SQL statement cannot be executed.

# Programmer Response: Either use an ALTER statement to
change the definition of the function or procedure to allow SQL
statements, or remove the failing SQL statement from the
external function or procedure.

Destination: 38001

-491  CREATE STATEMENT FOR USER-DEFINED
FUNCTION function-name MUST HAVE A
RETURNS CLAUSE, AND EITHER THE
EXTERNAL CLAUSE (WITH OTHER REQUIRED
KEYWORDS) OR THE SOURCE CLAUSE

Explanation: A required clause is missing in the CREATE for
function function-name. If EXTERNAL was specified, the fol-
lowing must also be specified:
- LANGUAGE
- PARAMETER STYLE

System Action: The statement cannot be executed.

Programmer Response: Correct the name and reissue the
failing statement.

Destination: 42601

-492  THE CREATE FUNCTION FOR function-name
HAS A PROBLEM WITH PARAMETER
NUMBER number. IT MAY INVOLVE A MIS-
MATCH WITH A SOURCE FUNCTION

Explanation: The parameter in position number of function
function-name is in error. The parameter in position number of
the source function is not castable to the corresponding param-
eter of the function being created.

If the parameter of the function being created is a table param-
eter then the corresponding parameter of the source function
must also be a table parameter. Furthermore, the column
numbers for both of the table parameters must be the same.

If the parameter of the function being created is not a table
parameter then the corresponding parameter of the source
function must also not be a table parameter.

System Action: The statement cannot be executed.

Programmer Response: Possible corrections include:
- Identify a different source function.
- Change the data type of the parameter of the function
  being created so that the data type of the source function
can be cast to this data type.

Destination: 42879

-495  ESTIMATED PROCESSOR COST OF
estimate-amount1 PROCESSOR SECONDS
(estimate-amount2 SERVICE UNITS) IN COST
CATEGORY cost-category EXCEEDS A
RESOURCE LIMIT ERROR THRESHOLD OF
limit-amount SERVICE UNITS

Explanation: The prepare of a dynamic INSERT, UPDATE,
DELETE, or SELECT SQL statement resulted in a cost esti-
mate that exceeded the error threshold value specified in the
resource limit specification table (RLST). This error is also
issued if DB2's cost category value was "B," and the default
action specified in the RLF_categoria_B column in the
RLST is to issue an error.

estimate_amount1 The cost estimate (in processor seconds) if
the prepared INSERT, UPDATE, DELETE or
SELECT statement were to be executed.

estimate_amount2 The cost estimate (in service units) if the
prepared INSERT, UPDATE, DELETE or
SELECT statement were to be executed.

cost-category DB2's cost-category for this SQL statement.
The possible values are A or B.

limit_amount The error threshold (in service units) speci-
fied in the RLFASTUERR column of the
RLST.

System Action: The prepare of the dynamic INSERT,
UPDATE, DELETE, or SELECT statement was unsuccessful.

Programmer Response: If this SQLCODE was returned
because the cost category value is "B," it might be that the
statement is using parameter markers or that some statistics
are not available for the referenced tables and columns. Make
sure the administrator has run the utility RUNSTATS on the
referenced tables. It might also be that UDFs will be invoked
-496 THE SQL STATEMENT CANNOT BE EXECUTED BECAUSE IT REFERENCES A RESULT SET THAT WAS NOT CREATED BY THE CURRENT SERVER

**Explanation:** The SQL statement cannot be executed because the current server is different from the server that called a stored procedure. The SQL statement can be any of the following:

- ALLOCATE CURSOR
- DESCRIBE CURSOR
- FETCH (using an allocated cursor)
- CLOSE (using an allocated cursor)

**System Action:** The statement cannot be executed.

**Programmer Response:** Connect to the server that called the stored procedure which created the result set before running the SQL statement that failed.

**Destination:** 51033

-497 THE MAXIMUM LIMIT OF INTERNAL IDENTIFIERS HAS BEEN EXCEEDED FOR DATABASE database-name

**Explanation:** The SQL statement cannot be executed because an internal identifier limit has been exceeded for the database. The cause of this error is due to one of the following: (1) On a CREATE DATABASE statement, the limit of 32511 DBIDs has been exceeded. (2) For all other statements, the limit of 32767 OBIDs has been exceeded for that database.

**System Action:** The SQL statement cannot be executed.

**Programmer Response:** (1) In the case of a DBID limit being exceeded, DROP all unused databases and issue a COMMIT.

(2) In the case of an OBID limit being exceeded, DROP all unused objects in the database and issue a COMMIT, specify a different database or run the MODIFY utility to reclaim unused OBIDs.

**Destination:** 54041

-499 CURSOR cursor-name HAS ALREADY BEEN ASSIGNED TO THIS OR ANOTHER RESULT SET FROM PROCEDURE procedure-name.

**Explanation:** An attempt was made to assign a cursor to a result set using the SQL statement ALLOCATE CURSOR and one of the following applies:

- The result set locator variable specified in the ALLOCATE CURSOR statement has been previously assigned to cursor cursor-name.

- Cursor cursor-name specified in the ALLOCATE CURSOR statement has been previously assigned to a result set from stored procedure procedure-name.

**System Action:** The statement cannot be executed.

**Programmer Response:** Determine if the target result set named in the ALLOCATE CURSOR statement has been previously assigned to a cursor.

If the result set has been previously assigned to cursor cursor-name, then either choose another target result set or call stored procedure procedure-name again and reissue the ASSOCIATE LOCATOR and ALLOCATE CURSOR statements.

If the result set has not been previously assigned to a cursor, the cursor cursor-name specified in the ALLOCATE CURSOR statement has been previously assigned to some result set from stored procedure procedure-name. You can not assign cursor cursor-name to another result set, so you must specify a different cursor name in the ALLOCATE CURSOR statement.

Correct the statements so that the exact syntax used to specify the procedure name on the CALL statement be the same as that on the ASSOCIATE LOCATOR and/or DESCRIBE PROCEDURE. If an unqualified name is used to CALL the procedure, the 1-part name must also be used on the other statements. If the CALL statement is made with a 3-part name, and the current server is the same as the location in the 3-part name, the ASSOCIATE LOCATOR or DESCRIBE procedure can omit the location.

**Destination:** 24516

-500 THE IDENTIFIED CURSOR WAS CLOSED WHEN THE CONNECTION WAS DESTROYED

**Explanation:** The FETCH, UPDATE, DELETE, or CLOSE statement identifies a closed cursor that was defined with the WITH HOLD option. The cursor was closed when the connection on which it was dependent was destroyed during a commit operation. The connection was destroyed because the application process placed it in the released state, or the application plan was bound with the DISCONNECT(AUTOMATIC) option.

**System Action:** The statement cannot be executed.

**Programmer Response:** The correction depends on the desired state of both the cursor and the connection, as follows:

- If you want the cursor closed, change the application program so that the cursor is not referenced in the closed state.

- If you want the cursor open and the connection was placed in the released state by the application program, change the program so that the connection is not placed in the released state until the cursor is explicitly closed.
-504  THE CURSOR NAME  cursor-name  IS NOT DEFINED

Explanation:  Cursor  cursor-name  was referenced in an SQL statement, and one of the following is true:

- Cursor  cursor-name  was not declared (using the DECLARE CURSOR statement) or allocated (using the ALLOCATE CURSOR statement) in the application program before it was referenced.
- Cursor  cursor-name  was referenced in a positioned UPDATE or DELETE statement which is not a supported operation for an allocated cursor.
- Cursor  cursor-name  was allocated, but a CLOSE cursor statement naming  cursor-name  was issued and deallocated the cursor before this cursor reference.
- Cursor  cursor-name  was allocated, but a ROLLBACK operation occurred and deallocated the cursor before this cursor reference.
- Cursor  cursor-name  was allocated, but its associated cursor declared in a stored procedure was not declared WITH HOLD, and a COMMIT operation occurred and deallocated the cursor before this cursor reference. The COMMIT operation can be either explicit (the COMMIT statement) or implicit (that is, a stored procedure defined as COMMIT_ON_RETURN = 'Y' was called before this cursor reference).
- Cursor  cursor-name  was allocated, but its associated stored procedure was called again since the cursor was allocated, new result sets were returned, and cursor  cursor-name  was deallocated.

System Action:  The statement cannot be executed.

Programmer Response:  Check the application program for completeness and for a possible spelling error in the cursor declaration or allocation. The declaration for or allocation of a cursor must appear in an application program before SQL statements that reference the cursor.

If the  cursor-name  was <UNKNOWN>, then the cursor was not successfully declared or allocated. This can occur if SQL(DB2) was used, and a warning message was issued during precompilation. Check the precompile output for warning messages on the DECLARE CURSOR or ALLOCATE CURSOR statement, and correct the statement.

For an allocated cursor, if an implicit or explicit COMMIT, ROLLBACK, or CLOSE occurred since the cursor was successfully allocated, modify the application program logic to do one of the following:

- After the COMMIT, ROLLBACK, or CLOSE operation, call the associated stored procedure again, and reissue the ASSOCIATE LOCATORS and ALLOCATE CURSOR statements.
- For COMMIT, declare the associated cursor in the stored procedure WITH HOLD so the COMMIT operation will not deallocate the cursor.

For an allocated cursor, if the associated stored procedure was called again and new result sets were returned since the cursor was allocated, reissue the ASSOCIATE LOCATORS and ALLOCATE CURSOR statements.

Destination:  34000
-507  THE CURSOR IDENTIFIED IN THE UPDATE OR DELETE STATEMENT IS NOT OPEN

Explanation: The application program attempted to execute an UPDATE or DELETE WHERE CURRENT OF cursor statement at a time when the specified cursor was not open.

System Action: The statement cannot be executed. No update or delete was performed.

Programmer Response: Check for a previous SQL return code that might have closed the cursor. SQLCODES -404, -652, -679, -901, -904, -908, -910, -911, and -913 force the cursor to close. After the cursor is closed, any fetches or close cursor statements receive SQLCODE -501. Any updates or deletes receive this SQLCODE -507. Correct the logic of the application program to ensure that the specified cursor is open at the time the UPDATE or DELETE statement is executed.

Destination: 24501

-508  THE CURSOR IDENTIFIED IN THE UPDATE OR DELETE STATEMENT IS NOT POSITIONED ON A ROW

Explanation: The application program attempted to execute an UPDATE or DELETE WHERE CURRENT OF cursor statement at a time when the specified cursor was not positioned on a row of the object table. The cursor must be positioned on the row that is to be updated or deleted.

# This SQL code can be issued if the cursor is no longer positioned on the row because another cursor in the same application program delete the row or updates an index column. This includes delete and index column updates that are performed as a result of rolling back to a savepoint.

System Action: The statement cannot be executed. No data was updated or deleted.

Programmer Response: Correct the logic of the application program to ensure that the cursor is correctly positioned on the intended row of the object table before the UPDATE or DELETE statement is executed. Note that the cursor is not positioned on a row if FETCH returned an SQLCODE = 100.

Destination: 24504

-509  THE TABLE IDENTIFIED IN THE UPDATE OR DELETE STATEMENT IS NOT THE SAME TABLE DESIGNATED BY THE CURSOR

Explanation: The application program attempted to execute an UPDATE or DELETE WHERE CURRENT OF cursor statement where the table named in that statement did not match the name of the table specified in the declaration for that cursor.

System Action: The statement cannot be executed. The update or delete was not performed.

Programmer Response: Correct the application program to ensure that the table identified in the UPDATE or DELETE statement is the same table identified in the declaration for the cursor.

Destination: 42827

-510  THE TABLE DESIGNATED BY THE CURSOR OF THE UPDATE OR DELETE STATEMENT CANNOT BE MODIFIED

Explanation: The application program attempted to execute an UPDATE or DELETE WHERE CURRENT OF cursor statement against a table or view that cannot be updated or deleted. This can occur for a delete from a read-only view or for an update in which the cursor was not defined with the FOR UPDATE clause.

This error code is also returned when the table exists at a remote location and DB2 has employed block fetching because you explicitly declared the cursor FOR FETCH ONLY, or because the application is bound CURRENTDATA(NO) and the cursor is ambiguous.

This error code is also returned if DB2 has employed parallelism to execute the SELECT statement associated with the cursor named in a DELETE WHERE CURRENT OF cursor statement, or if a DELETE WHERE CURRENT OF is issued against a row which DB2 cannot guarantee to have not been modified by another application since the time the cursor was positioned upon it (in accordance with ISO(CS) semantics for an ambiguous cursor in an application bound CURRENTDATA(NO)).

System Action: The statement cannot be executed. No data was updated or deleted in the object table.

Programmer Response: The requested UPDATE or DELETE cannot be performed. Refer to Chapter 6 of DB2 SQL Reference for information about restrictions on using UPDATE and DELETE operations against views.

For a remote table, modify the DECLARE CURSOR and then rebind the PLAN.

For a cursor that uses parallelism, disable parallelism for the query by using the DEGREE(1) BIND option for static SQL or by setting the CURRENT DEGREE special register to '1' for dynamic SQL.

For an ambiguous cursor in an application bound CURRENTDATA(NO), either make the cursor unambiguous (declare it FOR UPDATE OF), or rebind the application CURRENTDATA(YES).

Destination: 42828

-511  THE FOR UPDATE CLAUSE CANNOT BE SPECIFIED BECAUSE THE TABLE DESIGNATED BY THE CURSOR CANNOT BE MODIFIED

Explanation: The result table of the SELECT statement cannot be updated. This can occur if the SELECT specifies more than one table or view in the FROM clause, if the SELECT list contains a built-in function or DISTINCT, or if the statement contains an ORDER BY or GROUP BY or HAVING clause. This can also occur if a view is specified in the FROM clause and the view cannot be updated.

System Action: The statement cannot be executed. The specified cursor remains undefined in the application program.

Programmer Response: Updates cannot be performed on the result table as it is specified. Refer to Chapter 6 of DB2 SQL Reference for information about restrictions on the updating of views.

Destination: 42829
-512 STATEMENT REFERENCE TO REMOTE OBJECT IS INVALID

**Explanation:** One of the following conditions exists:

- The statement refers to multiple locations.
- A statement with a remote reference is being EXPLAINED either by a dynamic EXPLAIN statement or the `EXPLAIN(YES)` option.
- An alias is used incorrectly.
- A three-part name is implicitly or explicitly used in a statement that is not supported by the DB2 private protocols.
- A three-part name is implicitly or explicitly used in a triggered statement.

**System Action:** The statement cannot be executed.

**Programmer Response:** If the object cannot be meaningfully eliminated from the statement, see your Database Administrator for other ways to obtain the data required. Refer to Chapter 4 of *DB2 SQL Reference* for more information about using remote objects.

- If the remote object reference is in a triggered SQL statement, you can instead invoke a user-defined function or a stored procedure from the trigger and access the remote object from the function or stored procedure.

**Destination:** 56023

-513 THE ALIAS alias-name MUST NOT BE DEFINED ON ANOTHER LOCAL OR REMOTE ALIAS

**Explanation:** The object indicated by `alias-name` is a local or remote alias. An alias is not allowed to be defined on a local alias, and it should not be defined on a remote alias.

**System Action:** The statement cannot be executed.

**Programmer Response:** Modify the SQL statement to ensure that all object references are to base tables or views.

**Destination:** 42924

-514 THE CURSOR cursor-name IS NOT IN A PREPARED STATE

**Explanation:** The application program has tried to use a cursor, `cursor-name`, that is not in a prepared state. The cursor is associated with a statement that either (1) has never been prepared, or (2) has been invalidated by a commit or rollback operation.

**System Action:** The statement cannot be executed.

**Programmer Response:** For case (1), ensure that you prepare the statement that is named in the DECLARE CURSOR statement for `cursor-name` before you try to open the cursor. For case (2), do any of the following:

- Use the WITH HOLD option of DECLARE CURSOR.
- Do not execute a commit or rollback operation until you are finished using the cursor.
- Prepare the statement again after the commit or rollback.

**Destination:** 26501

-516 THE DESCRIBE FOR STATIC STATEMENT DOES NOT IDENTIFY A PREPARED STATEMENT

**Explanation:** An attempt was made to execute a DESCRIBE FOR STATIC for a statement that had not been successfully prepared beforehand. This error can occur when the DESCRIBE originates on an application requester that supports extended dynamic SQL. Because the target statement is static on the DB2 for MVS/ESA subsystem, the DESCRIBE statement fails.

**System Action:** The statement cannot be executed.

**Programmer Response:** Correct the logic of the application program to ensure that a statement is properly prepared before a DESCRIBE FOR STATIC of the statement is attempted. If the DESCRIBE FOR STATIC is a distributed request that originated on a system that supports extended dynamic SQL, contact your system administrator about changing the DB2 subsystem parameter DESCSTAT to YES to tolerate these DESCRIBE FOR STATIC requests against static SQL.

**Destination:** 26501

-517 CURSOR cursor-name CANNOT BE USED BECAUSE ITS STATEMENT NAME DOES NOT IDENTIFY A PREPARED SELECT STATEMENT

**Explanation:** The cursor `cursor-name` could not be used as specified because the prepared statement named in the declaration for the cursor was not a SELECT statement.

**System Action:** The statement cannot be executed.

**Programmer Response:** Verify that the statement-name is specified correctly in the PREPARE statement and the DECLARE CURSOR statement for cursor `cursor-name`.

Alternatively, correct the application program logic to ensure that only prepared SELECT statements are used in association with cursor declarations.

**Destination:** 07005

-518 THE EXECUTE STATEMENT DOES NOT IDENTIFY A VALID PREPARED STATEMENT

**Explanation:** One of the following conditions exists:

- The statement named in the EXECUTE statement has not been prepared.
- The statement named in the EXECUTE statement identifies a SELECT, VALUE INTO, or statement.
- The statement named in the EXECUTE IMMEDIATE statement identifies a SELECT, VALUE INTO, or statement.

**System Action:** The statement cannot be executed.

**Programmer Response:** Ensure that you prepare the statement prior to EXECUTE. Also, ensure that the statement you prepare is not a SELECT or VALUES INTO statement.

**Destination:** 07003
-519 THE PREPARE STATEMENT IDENTIFIES THE SELECT STATEMENT OF THE OPENED CURSOR cursor-name

Explanation: The application program has attempted to PREPARE (actually, re-PREPARE) the SELECT statement for the specified cursor at a time when that cursor was already open.

System Action: The statement cannot be executed. The cursor was not affected.

Programmer Response: Correct the logic of the application program so that it does not attempt to re-PREPARE the SELECT statement for a cursor when that cursor is open.

Destination: 24506

-525 THE SQL STATEMENT CANNOT BE EXECUTED BECAUSE IT WAS IN ERROR AT BIND TIME FOR SECTION = sectno PACKAGE = pkgname CONSISTENCY TOKEN = X'contoken'

Explanation: One of the following:
- The statement was in error when the package was bound, but the error was ignored then because the option SQLERROR (CONTINUE) was used. Since the statement contains an error, it cannot be executed.
- The statement might not be an executable statement at this location, or might only be executable by a DB2 application requester (for example, DECLARE TABLE in an application running on OS/2 causes this message).

The variables are:
sectno Section number
pkgname locid.collid.pkgid
contoken Consistency token in hexadecimal

System Action: The statement cannot be executed.

Programmer Response: If the SQL statement is not supposed to execute at the indicated location, then correct the program so that the statement in error does not execute at that location. Precompile, compile, and bind replace the package. If the SQL statement is supposed to execute at the indicated location, correct the problem found when it was bound and bind the package over using BIND with ACTION(REPLACE). If multiple versions of the package have been bound, issue the following SELECT statement to determine which version has the error: SELECT VERSION FROM locid.SYSIBM.SYSPACKAGE WHERE LOCATION = ' ' AND COLLID = 'collid' AND NAME = 'pkgid' AND HEX(CONTOKEN) = 'contoken'

Where:
locid Location name
collid Collection id
pkgid Program name

Destination: 51015

-526 THE REQUESTED OPERATION OR USAGE DOES NOT APPLY TO table type TEMPORARY TABLE table name

Explanation: DB2 assumes that the SQL statement being executed refers to a created or declared temporary table named table name, and the requested operation or usage in the statement is not allowed on the temporary table.

System Action: The statement cannot be processed.

Programmer Response: Modify the SQL statement to ensure that the object references are not to the indicated type of temporary table, or if table type is DECLARED and you intended table name to refer to an existing persistent base table, you must perform one of the following actions:
- Recreate the persistent base table table name with a different qualifier
- In the same application process, issue a DROP TABLE for table name followed by a COMMIT to drop the declared temporary table and afterwards be able to reference the persistent base table with the same table name in the same application process
- Remove the DECLARE GLOBAL TEMPORARY TABLE statement from the application process to use the persistent base table with the same table name

Destination: 42995

-530 THE INSERT OR UPDATE VALUE OF FOREIGN KEY constraint-name IS INVALID

Explanation: An UPDATE or INSERT operation attempted to place a value in a foreign key of the object table; however, this value was not equal to some value of the parent key of the parent table.

When a row is inserted into a dependent table, the insert value of a foreign key must be equal to the value of the parent key of some row of the parent table in the associated relationship.

When the value of a foreign key is updated, the update value of a foreign key must be equal to the value of the parent key of some row of the parent table in the associated relationship.

System Action: The UPDATE or INSERT statement cannot be executed. The object table is unchanged.

Programmer Response: Examine the insert or update value of the foreign key first, and then compare it with each of the parent keyvalues of the parent table to determine the cause of the problem.

Destination: 23503
-531 PARENT KEY IN A PARENT ROW CANNOT BE UPDATED BECAUSE IT HAS ONE OR MORE DEPENDENT ROWS IN RELATIONSHIP constraint-name

**Explanation:** For plans and packages bound beginning with Version 5 or dynamic SQL, a multi-row update of a parent key attempted to remove a parent key value on which a foreign key was dependent.

For plans and packages bound prior to Version 5 an UPDATE operation attempted to update a primary key in the specified row of the object table; however, the primary key in the specified row had dependent rows associated with it. The value of a primary key in a parent row cannot be updated if the parent row has any dependent rows.

**System Action:** The UPDATE statement cannot be executed. The object table is unchanged.

**Programmer Response:** Examine the parent key of the object table and the foreign key of the dependent table to determine if the value of the specified row of the parent key should be changed. If this does not expose the problem, examine the contents of the object table and the dependent table to determine the cause of the problem.

**Destination:** 23504

-532 THE RELATIONSHIP constraint-name RESTRICTS THE DELETION OF ROW WITH RID X 'rid-number'

**Explanation:** A DELETE operation attempted to delete a specified parent row in the object table and all related descendent rows in the descendent tables. However, a delete rule of RESTRICT or NO ACTION was specified for one or more descendent tables.

A row of the table cannot be deleted because it has a dependent in a relationship with a delete rule of RESTRICT or NO ACTION or the deletion cascades to a row which is a dependent in a relationship with a delete rule of RESTRICT or NO ACTION.

**System Action:** The DELETE statement cannot be executed. The contents of the object table are unchanged.

**Programmer Response:** Examine the delete rule for all descendent tables to determine the cause of the problem. The specific tables involved can be determined from the relationship ‘constraint-name’. The specific descendent row is known by RID X ‘rid-number’.

**Destination:** 23504

-533 INVALID MULTIPLE-ROW INSERT

**Explanation:** An INSERT operation with a subselect attempted to insert multiple rows into a self-referencing table.

The subselect of the INSERT operation should return no more than one row of data.

**System Action:** The INSERT statement cannot be executed. The contents of the object table are unchanged.

**Programmer Response:** Examine the search condition of the subselect to make sure that no more than one row of data is selected.

**Destination:** 21501

-534 THE PRIMARY KEY CANNOT BE UPDATED BECAUSE OF MULTIPLE-ROW UPDATE

**Explanation:** An UPDATE operation attempted to update a primary key on multiple rows of the object table.

An UPDATE statement updating the primary key cannot be used to update more than one row of the object table.

**Note:** This SQLCODE will only be issued for plans and packages bound prior to Version 5. SQLCODE -534 will not be issued for dynamic SQL or plans and packages bound with Version 5 or later releases.

**System Action:** The UPDATE statement cannot be executed. The contents of the object table are unchanged.

**Programmer Response:** Examine the search condition of the UPDATE statement to make sure that no more than one row of the object table is selected to be updated.

**Destination:** 21502

-536 THE DELETE STATEMENT IS INVALID BECAUSE TABLE table-name CAN BE AFFECTED BY THE OPERATION

**Explanation:** A DELETE operation with the indicated table referenced in a subquary was attempted.

If ‘T’ is the object table of the DELETE, the indicated table is one of the following:

- A dependent of ‘T’ in a relationship with a delete rule of CASCADE or SET NULL
- A dependent of another table in a relationship with a delete rule of CASCADE or SET NULL in which deletions from ‘T’ can cascade to that table.

**System Action:** The DELETE statement cannot be executed. The contents of the object table are unchanged.

**Programmer Response:** Do not attempt to reference a table in a subquery of a DELETE statement when the table can be affected by the DELETE statement.

**Destination:** 42914

-537 THE PRIMARY KEY CLAUSE, A FOREIGN KEY CLAUSE, OR A UNIQUE CLAUSE IDENTIFIES COLUMN column-name MORE THAN ONCE

**Explanation:** PRIMARY KEY, FOREIGN KEY, or UNIQUE can each be followed by a list of column names. The statement violates the rule that no column name can appear more than once in any such list.

**System Action:** The statement cannot be executed.

**Programmer Response:** Correct the statement to specify unique names for each column.

**Destination:** 42709

-538 FOREIGN KEY name DOES NOT CONFORM TO THE DESCRIPTION OF A PARENT KEY OF TABLE table-name

**Explanation:** The code is used to report that the definition of the indicated foreign key does not conform to the description of a parent key of the indicated table. Either the keys do not have the same number of columns or their descriptions are not identical. The requirement for identical descriptions includes data type, length attribute, and field procedure. The ‘name’ is
the constraint-name specified in the foreign key clause or, if a constraint-name was not specified, the first column-name specified in the clause.

System Action: The statement cannot be executed.

Programmer Response: Correct the statement so that the description of the foreign key conforms to that of a parent key of the indicated table.

Destination: 42830

-539  **TABLE table-name DOES NOT HAVE A PRIMARY KEY**

Explanation: The CREATE or ALTER TABLE statement cannot be executed because the indicated table does not have a primary key. Thus, the primary key cannot be dropped, or the table cannot be defined as a parent in a referential constraint.

System Action: The statement cannot be executed.

Programmer Response: Correct the statement to reference a table with a primary key or define a primary key before referencing the table in a FOREIGN KEY clause.

Destination: 42888

-540  **THE DEFINITION OF TABLE table-name IS INCOMPLETE BECAUSE IT LACKS A PRIMARY INDEX OR A REQUIRED UNIQUE INDEX**

Explanation: The table named was defined with a PRIMARY KEY clause, a UNIQUE clause, or with a ROWID column with the GENERATED BY DEFAULT attribute. Its definition is incomplete, and it cannot be used until a unique index is defined for

- the primary key (the primary index)
- a ROWID column
- for each set of columns in any UNIQUE clause (the required unique indexes).

An attempt was made to use the table in a FOREIGN KEY clause or in an SQL manipulative statement.

System Action: The statement cannot be executed.

Programmer Response: Define a primary index or a required unique index on the table before referencing it.

Destination: 57001

-542  **column-name CANNOT BE A COLUMN OF A PRIMARY KEY, A UNIQUE CONSTRAINT, OR A PARENT KEY BECAUSE IT CAN CONTAIN NULL VALUES**

Explanation: The code is used to report that a column identified in a PRIMARY KEY, a UNIQUE constraint clause, or a parent key (via a REFERENCES clause) is defined to allow null values.

System Action: The statement cannot be executed.

Programmer Response: In the case of a column identified in a PRIMARY KEY or a UNIQUE constraint clause, correct the statement and rerun it.

Destination: 23512

-545  **THE REQUESTED OPERATION IS NOT ALLOWED BECAUSE A ROW DOES NOT SATISFY THE CHECK CONSTRAINT check-constraint**

Explanation: Table check constraint violations occurred on an INSERT or UPDATE statement. The resulting row violated the check constraint definition on the table.

System Action: The INSERT or UPDATE statement cannot be executed. The contents of the table are unchanged.

Programmer Response: Examine the data and the check constraint definition in the SYSIBM.SYSCHECKS catalog table to determine why the INSERT or UPDATE statement was rejected. The data must be changed to satisfy the check constraint.

Destination: 23513
THE CHECK CONSTRAINT constraint-name IS INVALID

Explanation: A check constraint in the CREATE TABLE or ALTER TABLE statement is invalid for one or more of the following reasons:

- The constraint definition refers to a column that has a field procedure.
- The constraint definition refers to a column with a data type that is lower in the hierarchy of numeric data types than the data type of any other operand. The hierarchy is as follows:
  
  - small integer < large integer < decimal
  - < single precision float < double precision float
- The constraint definition refers to a column with a numeric data type that is not the same numeric data type as that of the other column operands.
- The constraint definition refers to a column with a length that is shorter than the other operands when the column and other operands are not character string data types.
- The constraint definition refers to a built-in or user-defined function.
- The constraint definition uses a cast function that requires conversion of the data. The only functions that are allowed in a check constraint are cast functions that do not require conversion of the data.

System Action: The statement is not executed.

For ALTER TABLE, the check constraint is not added to the object table. The definition of the table is unchanged.

For CREATE TABLE, the table is not created.

Programmer Response: Correct the check constraint definition and execute the statement again.

Destination: 42621

A CHECK CONSTRAINT THAT IS DEFINED WITH column-name IS INVALID

Explanation: A check constraint in the CREATE TABLE or ALTER TABLE statement is invalid for one or more of the following reasons:

- The constraint definition refers to a column that has a field procedure.
- The constraint definition refers to a column with a data type that is lower in the hierarchy of numeric data types than the data type of any other operand. The hierarchy is as follows:
  
  - small integer < large integer < decimal
  - < single precision float < double precision float
- The constraint definition refers to a column with a numeric data type that is not the same numeric data type as that of the other column operands.
- The constraint definition refers to a column with a length that is shorter than the other operands when the column and other operands are not character string data types.
- The constraint definition refers to a ROWID column.
- The constraint definition refers to a LOB column.

System Action: The statement is not executed.

For ALTER TABLE, the check constraint is not added to the object table. The definition of the table is unchanged.

For CREATE TABLE, the table is not created.

Programmer Response: Correct the check constraint definition and execute the statement again.

Destination: 42621

THE statement STATEMENT IS NOT ALLOWED FOR object_type1 object_name BECAUSE THE BIND OPTION DYNAMICRULES(RUN) IS NOT IN EFFECT FOR object_type2

Explanation: A program attempted to issue the indicated SQL statement that is one of several SQL statements that cannot be issued from a plan or package for which the option DYNAMICRULES(RUN) is not in effect. Those SQL statements are:

- Dynamic GRANT statement
- Dynamic REVOKE statement
- Dynamic ALTER statement
- Dynamic CREATE statement
- Dynamic DROP statement

The indicated SQL statement is bound to one of the following:

- The named plan or package that was not bound with the option DYNAMICRULES(RUN)
- The named package that was not bound with the DYNAMICRULES option, but is appended to a plan that was not bound with DYNAMICRULES(RUN)

statement

object_type1 PACKAGE or DBRM
object_name

If object_type1 is PACKAGE, object_name is the name of the package in the format 'location-id.collection-id.package-id'.

If object_type1 is DBRM, object_name is the name of the DBRM in the format 'plan-name DBRM-name'.

object_type2 PLAN or PACKAGE

If object_type1 is PACKAGE, object_type2 can be either PACKAGE or PLAN (whichever is bound with a DYNAMICRULES value other than RUN).

If object_type1 is DBRM, object_type2 is PLAN.

System Action: The SQL statement cannot be executed.

Programmer Response: Do one of the following to correct the error:

- If the SQL statement is embedded, remove it, precompile and compile the application program again, and reissue the BIND command with the desired DYNAMICRULES option.
- If appropriate, use the SQL statement with a package or plan that is bound with DYNAMICRULES(RUN).
- Issue the REBIND command with the DYNAMICRULES(RUN) option for the plan or package to which the SQL statement is bound.
Refer to the BIND PACKAGE(DSN), BIND PLAN(DSN), REBIND PACKAGE(DSN), or REBIND PLAN(DSN) statement in *DB2 Command Reference* for the description of the DYNAMICRULES option and the expected results. Determine if either the SQL statement should be removed from the program or the plan or package should be rebound with the DYNAMICRULES(RUN) option.

**Destination:** 42509

---

**-551 auth-id DOES NOT HAVE THE PRIVILEGE TO PERFORM OPERATION operation ON OBJECT object-name**

**Explanation:** Authorization ID 'auth-id' attempted to perform 'operation' on object 'object-name' without having been granted the proper authority to do so. This error might also occur if the object is a read-only view (for INSERT, DELETE, or UPDATE), or if 'authorization ID' is trying to create a table or view with an authorization ID other than its own. You can create a table from an 'authorization ID' other than your own only if your authorization ID is SYSADM, DBADM, or DBCTRL. You can create a view from an 'authorization ID' other than your own only if your authorization ID is SYSADM.

When 'operation' is 'GRANT ***', the keyword ALL was used in the GRANT statement, but the grantor 'auth-id' did not possess any privilege to grant.

If this error occurs while DB2 is creating or altering a table involving referential constraints, this code reports that the user does not have the necessary ALTER privilege to perform a FOREIGN KEY, DROP FOREIGN KEY, or DROP PRIMARY KEY operation. The 'object-name' identifies the object table of the CREATE or ALTER TABLE statement, not the table for which the user lacks the ALTER privilege.

If this error occurs for a distributed SQL request, then:

1. If authorization ID translation is in effect for either the requesting DB2 site or the serving (responding) DB2 site, then 'auth-id' is the translated authorization ID. Refer to Section 3 (Volume 1) of *DB2 Administration Guide* for information on authorization ID translation.
2. If an alias name was used in the SQL statement, then 'object-name' is the resolved remote table or view name.

If the operation is a DROP PACKAGE, the object name consists of the collection ID, the package name and the consistency token. The consistency token uniquely identifies which version of the package the user does not have authorization to drop.

**Note:** Beginning with Version 5, SQLCODE -551 will be returned instead of SQLCODE -204 for the runtime error where an object does not exist and the CURRENT RULES special register is set to 'STD'.

**System Action:** The statement cannot be executed.

**Installation Action:** Check for an attempted authorization violation.

**Programmer Response:** Ensure that the authorization ID has been granted the authority necessary to perform the desired operation.

**Destination:** 42502

---

**-553 auth-id SPECIFIED IS NOT ONE OF THE VALID AUTHORIZATION IDS**

**Explanation:** The authorization ID specified as the value of the 'authorization-id' or host variable in the SQL SET CURRENT SQLID statement is neither the user's primary authorization ID nor one of the associated secondary authorization IDs.

**System Action:** The SET CURRENT SQLID statement cannot be executed. The current SQL ID is not changed.

**Programmer Response:** Correct the error in the statement or contact the security administrator to have the authorization ID defined for your use.

**Destination:** 42503

---

**-554 AN AUTHORIZATION ID CANNOT GRANT A PRIVILEGE TO ITSELF**

**Explanation:** An authorization ID attempted to execute a GRANT statement in which that ID itself appears as one of the entries in the list of 'grantee' authorization IDs.

An authorization ID cannot GRANT a privilege to itself. However, if SQLRULES(STD) is in effect or CURRENT RULES contains STD, GRANT to self is allowed.

**System Action:** The statement cannot be executed. No privileges were granted.

**Programmer Response:** Refer to Chapter 5 of *DB2 SQL Reference* for information about restrictions on the use of the GRANT statement.

**Destination:** 42502

---

**-555 AN AUTHORIZATION ID CANNOT REVOKE A PRIVILEGE FROM ITSELF**

**Explanation:** An authorization ID attempted to execute a REVOKE statement in which that ID itself appears as one of the entries in the list of authorization IDs to be revoked.

An authorization ID cannot REVOKE its own privilege. However, if SQLRULES(STD) is in effect or CURRENT RULES contains STD, REVOKE to self is allowed.

**System Action:** The statement cannot be executed. No privileges were revoked.

**Programmer Response:** Refer to Chapter 6 of *DB2 SQL Reference* for information about restrictions on the use of the REVOKE statement.

**Destination:** 42502
authid2 CANNOT HAVE THE privilege PRIVILEGE on object REVOKED BY authid1
BECAUSE THE REVOKEE DOES NOT POSSESS THE PRIVILEGE OR THE REVOKER
DID NOT MAKE THE GRANT

Explanation: The REVOKE statement was not successful for one of the following reasons:

- Authid2 does not possess the privilege.
- The revoker, authid1, did not explicitly grant the privilege to authid2.
- Authid2 is the owner of the specified object.
- When privilege is '***' the keyword ALL was used in the REVOKE statement, but authid2 did not possess any privilege to revoke.
- When authid1 is ALL, the BY ALL clause was used in the REVOKE statement, but authid2 did not possess any privilege to revoke.

An authorization ID can revoke only the privileges that it has explicitly granted to other authorization IDs, unless the authorization ID has SYSADM or SYSCtrl authority and specifies the BY clause. No authorization ID, not even SYSADM, can revoke 'privileges' on an object from the object owner.

System Action: The statement cannot be executed. No privileges were revoked from any authorization ID.

Programmer Response: Check the appropriate authorization catalog tables to verify that authid2 possesses the privilege to be revoked. Queries can be made with GRANTEE = authid2 and the privilege column not = blanks. Correct and reissue the REVOKE statement.

Destination: 42504

INCONSISTENT GRANT/REVOKE KEYWORD
keyword. PERMITTED KEYWORDS ARE
keyword-list

Explanation: The GRANT or REVOKE statement contains a syntax or spelling error at or before the specified 'keyword'. As an aid to the programmer, 'keyword-list' provides a list of the keywords that would be permitted in this context.

Alternatively:

- The mixture of privileges specified on the GRANT or REVOKE statement is not permitted. The privileges must all be of one type, and consistent with the form of the GRANT or REVOKE statement.
- REVOKE UPDATE (column-list) is not permitted; only REVOKE UPDATE is valid.
- The keywords DELETE, INSERT, SELECT, TRIGGER, UPDATE, REFERENCES and ALTER cannot be specified for an auxiliary table.

System Action: The statement cannot be executed.

Programmer Response: Correct the syntax of the GRANT or REVOKE statement.

Destination: 42852

INVALID CLAUSE OR COMBINATION OF CLAUSES ON A GRANT OR REVOKE

Explanation: The location qualifier specified for a GRANT or REVOKE statement is invalid.

System Action: The statement cannot be executed.

Programmer Response: Refer to Chapter 6 of DB2 SQL Reference for valid keywords for the GRANT statement.

Destination: 56025

ALL AUTHORIZATION FUNCTIONS HAVE BEEN DISABLED

Explanation: The authorization mechanism has been disabled in the DB2 subsystem. Consequently, GRANT and REVOKE statements are ignored.

System Action: The statement cannot be executed. No privileges were granted or revoked.

Programmer Response: Do not attempt to execute GRANT or REVOKE statements unless and until the authorization mechanism is enabled in the DB2 subsystem.

Destination: 57002

bind-type AUTHORIZATION ERROR USING
auth-id AUTHORITY PACKAGE = package-name
PRIVILEGE = privilege

Explanation: The authorization ID given does not have the privilege indicated, and cannot invoke the indicated subcommand against the indicated package.

System Programmer Response: The indicated privilege must be granted to the authorization ID that will become the package owner.

Destination: 42501
-571  THE STATEMENT WOULD RESULT IN A MULTIPLE SITE UPDATE

Explanation:
This SQLCODE is issued in the following situations:
- When an application program operating in an IMS or CICS environment attempts to modify data at a remote location where multi-site update capabilities are not supported.
- When an application program has explicit SQL statements within a commit scope that would result in updates at multiple sites where one of the sites at which data is being updated does not support multi-site update.

This SQLCODE can be issued when an application program explicitly modifies data at a single location within a commit scope. This can occur in the following situations:
- A package or plan associated with the application program was invalidated.
- A package or plan was bound at one release of DB2 and fallback occurs to a prior release.

In the situations described above, an implicit autobind is done on behalf of the user. An autobind results in the DB2 catalog being updated. The conditions that must exist for this SQLCODE to be issued when an autobind occurs are:
- One site where data has been modified does not support multi-site update.
- The autobind occurs at a separate and distinct site from where an application program explicitly modifies data.
- At the time of the autobind, locks are being held to process an SQL statement within the application program.

System Action: The statement cannot be executed.

Programmer Response:
- Ensure that all requests for modifications to the data are confined to a single location within any given commit scope for any application that references a location that does not support multi-site update.
- For programs operating in an IMS or CICS environment where the remote database systems do not support multi-site update, all SQL statements must be read-only access.
- If an autobind is causing this SQLCODE to be issued, REBIND the plan or package.

Destination: 25000

-573  TABLE table-name DOES NOT HAVE A UNIQUE KEY WITH THE SPECIFIED COLUMN NAMES

Explanation: A referential constraint cannot be defined with the specified table as the parent because a unique index with the specified column names does not exist for the identified parent table.

System Action: The statement cannot be executed.

Programmer Response: Create a unique index with the specified columns for the parent table.

Destination: 42890

-574  THE SPECIFIED DEFAULT VALUE OR IDENTITY ATTRIBUTE VALUE CONFLICTS WITH THE DEFINITION OF COLUMN column-name

Explanation: The DEFAULT value specified for column-name is not valid for one of the following reasons:
- The value is not assignable to the column because the constant does not conform to the format for a constant of that data type, or the value has the incorrect length or precision.
- A floating-point constant is specified and the column is not a floating point data type.
- A decimal constant is specified and non-zero digits would be truncated when assigned to the column.
- The value is more than 255 bytes, including quotes for strings, introducer characters such as the X for a hex constant, fully qualified function names, and parentheses.
- Either the USER or CURRENT SIDI special register is specified and the length attribute of the character string data type is less than 8.
- A system-generated cast function was specified and the column is not defined with a user-defined distinct type.
- A function was specified that is not supported. A function may only be specified when the data type is a distinct type, and in this case the specified function must be one of the system-generated cast functions associated with this distinct type.
- WITH DEFAULT is specified with a value other than NULL for a LOB column.
- A value with non-zero scale was specified for the START WITH or INCREMENT BY option of an identity column with the DECIMAL data type.

System Action: The SQL statement cannot be executed.

Programmer Response: Specify a default value that is valid for the definition of the column.

Destination: 42894

-577  object-type object-name ATTEMPTED TO MODIFY DATA WHEN THE DEFINITION OF THE FUNCTION OR PROCEDURE DID NOT SPECIFY THIS ACTION

Explanation: The current environment does not allow SQL statements that modify data. One of the following situations has occurred:
- A user-defined function or stored procedure object-name was invoked and attempted to modify data, but the function or procedure was defined without the MODIFIES SQL option.
- A user-defined function or stored procedure object-name was invoked and attempted to execute a data definition statement, but the function or procedure was defined without the MODIFIES SQL option.
- A function or procedure defined with READS SQL DATA, CONTAINS SQL, or NO SQL has attempted to invoke another function or procedure defined with MODIFIES SQL DATA.

In an environment of nested functions and procedures, the SQL option in effect is the most restrictive one that has been specified in the nested hierarchy of functions and procedures.
The SQL data access option in effect does not allow for modifying the data.

Programmer Response: Either use an ALTER statement to change the definition of the function or procedure to allow statements that modify data, or remove the failing SQL statement from the external function or procedure.

Destination: 38002

-579 object-type object-name ATTEMPTED TO READ DATA WHEN THE DEFINITION OF THE FUNCTION OR PROCEDURE DID NOT SPECIFY THIS ACTION

Explanation: The current environment does not allow SQL statements that read data. One of the following situations had occurred:

- A user-defined function or stored procedure object-name was invoked and attempted to read data, but the function or procedure was defined without the READS SQL DATA or MODIFIES SQL DATA option.
- A function or procedure defined with CONTAINS SQL or NO SQL has attempted to invoke another function or procedure defined with READS SQL DATA.

In an environment of nested functions and procedures, the SQL option in effect is the most restrictive one that has been specified in the nested hierarchy of functions and procedures.

System Action: The SQL statement failed.

Programmer Response: Either use an ALTER statement to change the definition of the function or procedure to allow statements that read data, or remove the failing SQL statement from the external function or procedure.

Destination: 38004

-580 THE RESULT-EXPRESSIONS OF A CASE EXPRESSION CANNOT ALL BE NULL

Explanation: There is a CASE expression in the statement that has all the result-expressions (expressions following the THEN and ELSE keywords) coded with the keyword NULL.

System Action: The statement cannot be processed.

Programmer Response: Change the CASE expression to include at least one result-expression with a keyword other than NULL.

Destination: 42625

-581 THE DATA TYPES OF THE RESULT-EXPRESSIONS OF A CASE EXPRESSION ARE NOT COMPATIBLE

Explanation: There is a CASE expression in the statement that has result-expressions (expressions following THEN and ELSE keywords) that are not compatible. The data type of the result-expressions might be incompatible because the CASE condition result data types are not all:

- character
- graphic
- numeric
- date
- time
- timestamp

System Action: The statement cannot be processed.

Programmer Response: Correct the result-expressions so that they are compatible.

Destination: 42804

-582 THE SEARCH-CONDITION IN A SEARCHED-WHEN-CLAUSE CANNOT BE A QUANTIFIED PREDICATE, IN PREDICATE, OR AN EXISTS PREDICATE.

Explanation: The search-condition in a searched-when-clause specifies a quantified predicate, an IN predicate, or an EXISTS predicate, but is not allowed.

System Action: The statement cannot be processed.

Programmer Response: Correct the search-condition.

Destination: 42625

-583 THE USE OF FUNCTION function-name IS INVALID BECAUSE IT IS NOT DETERMINISTIC OR HAS AN EXTERNAL ACTION

Explanation: The function function-name is defined as a not deterministic function or a function with an external action. This type of function is not supported in the context in which it is used. The contexts in which these are not valid are:

- in the expression prior to the first WHEN keyword in a simple-case-expression.
- in the WHERE clause of the subselect in a CREATE VIEW statement if the WITH CHECK OPTION clause is specified.

System Action: The statement cannot be executed.

Programmer Response: If the use of a not deterministic or external action function was not intended, substitute a function without these characteristics. If the behavior associated with the not deterministic or external action function is intentional, use the alternate form of the statements that make that intent explicit:

- Instead of a simple-when-clause, use the corresponding searched-when-clause where the function would get specified in each search-condition.
- Remove the WITH CHECK OPTION from the CREATE VIEW statement.

Destination: 42845

-585 THE SCHEMA NAME schema-name CANNOT APPEAR MORE THAN ONCE IN THE CURRENT PATH

Explanation: The current path includes schema-name more than once. The current path can only include one occurrence of each schema name.

System Action: The statement cannot be executed.

Programmer Response: Remove duplicate occurrences of schema-name from the current path.

Destination: 42732
**-586** THE TOTAL LENGTH OF THE CURRENT PATH SPECIAL REGISTER CANNOT EXCEED 254 CHARACTERS

**Explanation:** The CURRENT PATH special register is defined as a VARCHAR(254). The content of the string includes each schema name delimited with double quotes and separated from the next schema name by a comma. The total length of the string of all schema names in the CURRENT PATH cannot exceed 254 characters. A SET CURRENT PATH statement causing this message would exceed this limit.

**System Action:** The statement is not executed.

**Programmer Response:** Remove schema names to reduce the total length to fit the 254 character maximum length. If all schema names are required, it may be necessary to consolidate some user-defined functions so that fewer schema names are required for the CURRENT PATH.

**Destination:** 42907

---

**-587** A LIST OF item-references ARE NOT IN THE SAME FAMILY

**Explanation:** Each item-reference in the SET assignment statement is either a host-variable or a transition-variable. The list of item-references must be of the same family, meaning if one of the item-references is a transition-variable, then all of the item-references in the list must be a transition-variable. If the statement is used in the triggered action of a CREATE TRIGGER statement, each item-reference must identify a transition-variable. If the statement is used in any other context, each item-reference must identify a host-variable.

**System Action:** The statement cannot be executed.

**Programmer Response:** Correct the statement and execute it again.

**Destination:** 42834

---

**-590** PARAMETER NAME parameter-name IS NOT UNIQUE IN THE CREATE FOR ROUTINE routine-name

**Explanation:** The parameter name parameter-name specified on a CREATE FUNCTION or CREATE PROCEDURE statement for routine-name is not unique.

**System Action:** The statement cannot be executed.

**Programmer Response:** Change the name of the parameter to make all of the parameter names unique within the CREATE statement.

**Destination:** 42734

---

**-592** NOT AUTHORIZED TO CREATE FUNCTIONS OR PROCEDURES IN WLM ENVIRONMENT env-name

**Explanation:** This message is issued when:

- The value of the env-name token is ‘NO WLM ENVIRONMENT’, and the check for authorization to the DB2-managed stored procedures address space failed because the NO WLM ENVIRONMENT clause was specified on the CREATE PROCEDURE statement.
- There is no DB2-managed stored procedures address space.

**System Action:** The statement cannot be executed.

**Programmer Response:** To correct the error, perform one of the following actions:

- If the value of the env-name token is ‘NO WLM ENVIRONMENT’, choose a different value for the WLM ENVIRONMENT keyword or request authorization to create objects in the specified WLM ENVIRONMENT from the system administrator.
- If there is no DB2-managed stored procedures address space, request that one be created. Also request that a RACF PERMIT be completed to allow access to this resource.

**Destination:** 42510

---

**-593** NOT NULL MUST BE SPECIFIED FOR ROWID OR DISTINCT TYPE COLUMN column-name

**Explanation:** ROWID columns and distinct type columns for which the source type is a ROWID do not support null values. When a ROWID column (or distinct type for which the source type is a ROWID) is defined on a CREATE TABLE, ALTER TABLE, or DECLARE TABLE statement, the NOT NULL clause must be specified for the column.

**System Action:** The statement cannot be executed.

**Programmer Response:** Change the statement to specify NOT NULL for ROWID column column-name.

**Destination:** 42831

---

**-601** THE NAME OF THE OBJECT TO BE CREATED OR THE TARGET OF A RENAME STATEMENT IS IDENTICAL TO THE EXISTING NAME name OF THE OBJECT TYPE obj-type

**Explanation:** One of the following situations has been detected:

- A CREATE statement tried to create an object name of type obj-type, but an object of that type with the same name is already defined in the DB2 subsystem.
  - If obj-type is CONSTRAINT, the name was specified in the FOREIGN KEY clause or the CHECK clause of either a CREATE or ALTER TABLE statement. All referential integrity and check constraint names defined on a table must be unique.
  - If obj-type is TABLE or VIEW, and a CREATE ALIAS statement failed, then the alias-name specified in the CREATE ALIAS statement is identical to the table name or view name specified. The TABLE or VIEW might not exist in the DB2 subsystem.
  - If obj-type is DISTINCT TYPE, and a CREATE DISTINCT TYPE statement failed, then there is already a user-defined type existing with the same name as the distinct type name specified in the CREATE DISTINCT TYPE statement.
  - If obj-type is FUNCTION or PROCEDURE, and a CREATE FUNCTION or CREATE PROCEDURE statement failed, then there is already a routine existing with the same name as the name specified in the CREATE FUNCTION or CREATE PROCEDURE statement.
  - If obj-type is FUNCTION, and a CREATE DISTINCT TYPE statement failed, then there is already a cast function existing with the same name as the distinct type and an input parameter of the source type or
there is already a cast function existing with the same
name as the source type and an input parameter of the
distinct type name.

- A RENAME statement specified a target name name, but
an object with the same name is already defined in the
DB2 subsystem.

System Action: The CREATE, ALTER or RENAME state-
ment cannot be executed. No new object was created, no
existing object was altered, and no existing object was
renamed.

Programmer Response: Either drop the existing object or
choose another name. If obj-type is data set, do an IDCAMS
DELETE of the data set before retrying the CREATE. Refer to
Chapter 3 of DB2 SQL Reference for information about the
scope of object names in DB2.

Destination: 42710

-602 TOO MANY COLUMNS SPECIFIED IN A
CREATE INDEX

Explanation: The number of columns specified in the
CREATE INDEX statement exceeds 64, the maximum per-
mitted by DB2.

System Action: The statement cannot be executed. The
specified index was not created.

Programmer Response: The index definition must be modi-
ﬁed to conform to the system-imposed column limit of 64.

Destination: 54008

-603 A UNIQUE INDEX CANNOT BE CREATED
BECAUSE THE TABLE CONTAINS ROWS
WHICH ARE DUPLICATES WITH RESPECT TO
THE VALUES OF THE IDENTIFIED COLUMNS

Explanation: The index deﬁned in the CREATE INDEX state-
ment could not be created as unique because the speciﬁed
table already contains rows that are duplicates with respect to
the values of the identiﬁed columns.

System Action: The statement cannot be executed.

Programmer Response: Examine the data to ascertain
whether or not the duplicate data is valid. Alternatively, con-
sider creating a nonunique index.

Destination: 23515

-604 A DATA TYPE DEFINITION SPECIFIES AN
INVALID LENGTH, PRECISION, OR SCALE
ATTRIBUTE

Explanation: A data type deﬁnition in a CREATE or ALTER
statement contains an invalid length, precision, or scale at-
tribute speciﬁcation. In addition, the speciﬁcation of data type
might be incorrect or invalid. Or, the column deﬁnition in a view
referenced in a CREATE TABLE LIKE view has an invalid
length.

System Action: The statement cannot be executed. The
speciﬁed object was not created or altered.

Programmer Response: Correct the syntax, and resubmit
the statement. Refer to Chapter 3 of DB2 SQL Reference for
information about valid length, precision, and scale attributes
for the data type of an object.

-607 OPERATION OR OPTION operation IS NOT
DEFINED FOR THIS OBJECT

Explanation: The operation or option cannot be performed on
the object speciﬁed in the SQL statement.

System Action: The statement cannot be executed.

Programmer Response: If an option of the SQL statement is
not allowed for this object, modify the SQL statement and
resubmit the statement. If an operation is not deﬁned for the
object, the statement cannot be executed.

Destination: 42832

-611 ONLY LOCKMAX 0 CAN BE SPECIFIED WHEN
THE LOCK SIZE OF THE TABLESPACE IS TABLESPACE OR TABLE

Explanation: This message is issued when:

- The LOCKSIZE of the table space is TABLESPACE or
TABLE, and LOCKMAX is being altered to or created as a
nonzero value.

- The LOCKSIZE of the table space is being altered to
TABLESPACE or TABLE, and LOCKMAX is being altered
to or created as a nonzero value.

If LOCKSIZE is TABLESPACE or TABLE, LOCKMAX must be
0 because lock escalation is not supported from these levels.

System Action: The statement cannot be executed.

Programmer Response: Do one of the following:

- Reissue the statement with LOCKMAX 0.
- Alter the LOCKSIZE of the table space to a value other
than TABLESPACE or TABLE.

Destination: 53088

-612 column-name IS A DUPLICATE COLUMN NAME

Explanation: The CREATE INDEX, CREATE TABLE,
CREATE VIEW or ALTER TABLE statement speciﬁes the
same ‘column-name’ for two (or more) columns of the index,
table, view, or the UPDATE OF clause of a trigger deﬁnition
speciﬁes the same column name more than once. Column
names must be unique within an index, a table, a view, or in
the UPDATE OF clause of a trigger deﬁnition. A column cannot
be speciﬁed in more than one ALTER TABLE clause except if
it is speciﬁed in an ALTER COLUMN clause and ADD CHECK
CONSTRAINT clause.

System Action: The statement cannot be executed. The
speciﬁed index, table, view, or trigger was not created.

Programmer Response: Correct the CREATE statement to
specify unique names for each of the columns of the index,
table, view, or the columns in the UPDATE OF clause of a
trigger deﬁnition. Correct the ALTER statement to specify
unique names for each of the ALTER COLUMN clauses.

This error can also occur on CREATE TABLE when a column
list of a PRIMARY KEY, FOREIGN KEY, or UNIQUE clause
contains two or more occurrences of the same column name.

Destination: 42711
-613 THE PRIMARY KEY OR A UNIQUE CONSTRAINT IS TOO LONG OR HAS TOO MANY COLUMNS

Explanation: In a list of columns following either PRIMARY KEY or UNIQUE, the number of columns is greater than 64 or the sum of the column length attributes is greater than the number allowed for the type of index.

System Action: The CREATE or ALTER statement cannot be executed. The specified table cannot be created or altered.

Programmer Response: Change the table definition to keep within the prescribed limits.

Destination: 54008

-614 THE INDEX CANNOT BE CREATED OR THE LENGTH OF A COLUMN CANNOT BE CHANGED BECAUSE THE SUM OF THE INTERNAL LENGTHS OF THE IDENTIFIED COLUMNS IS GREATER THAN THE ALLOWABLE MAXIMUM

Explanation: The index could not be created or the length of a column cannot be changed because the sum of the internal lengths of the key columns would exceed the allowable maximum. The maximum permitted key length is 255.

System Action: The statement cannot be executed. The specified index was not created or the length of the column was not changed.

Programmer Response: The definition for the index must be modified (possibly by eliminating one or more key columns) to reduce the length of the key to the permitted maximum. Refer to Chapter 6 of DB2 SQL Reference if you require a complete explanation of other possible maximum key lengths and how they are computed.

Destination: 54008

-615 operation-type IS NOT ALLOWED ON A PACKAGE IN USE

Explanation: The operation 'operation-type' cannot be performed because the package is in use by the same application process.

operation-type Type of bind operation (BIND, REBIND or DROP).

System Action: The BIND, REBIND, or DROP operation on the package is not performed.

Programmer Response: Change the application to invoke the BIND, REBIND or DROP operation when the package is not used by the same application process.

Destination: 55006

-616 obj-type1 obj-name1 CANNOT BE DROPPED BECAUSE IT IS REFERENCED BY obj-type2 obj-name2

Explanation: Some types of objects cannot be dropped if there are other objects which are dependent upon them. For example, a storage group cannot be dropped if there are one or more existing table spaces that use that storage group.

Execution of the specified DROP statement would drop object 'obj-name1' of type 'obj-type1' on which object 'obj-name2' of type 'obj-type2' is dependent.

Programmer Response: Either create the index as TYPE 2 or, if LOCKSIZE ROW was used, alter the LOCKSIZE of the table space containing the table to a value other than LOCKSIZE ROW.

System Action: The statement cannot be executed. The index was not created.

Destination: 56089

-618 OPERATION operation IS NOT ALLOWED ON SYSTEM DATABASES

Explanation: System databases cannot be the object of certain types of operations. The attempted 'operation' cannot be performed on system databases. One possible reason for this error is that CCSID ASCII was specified when a system database was being created.

System Action: The statement cannot be executed. No changes were made to the specified system database.

Programmer Response: Do not attempt to perform the requested operation on system databases.

Destination: 42832

-619 OPERATION DISALLOWED BECAUSE THE WORK FILE DATABASE IS NOT STOPPED

Explanation: The statements CREATE, ALTER or DROP for a table space in the work file database cannot be processed unless the work file database is stopped (using the STOP command).

System Action: The statement cannot be executed.

Programmer Response: Issue the -DISPLAY DATABASE command to verify that the work file database is stopped before resubmitting the statement.
-620  KEYWORD keyword IN stmt type STATEMENT IS NOT PERMITTED FOR A space type SPACE IN THE database type DATABASE

Explanation: The specified keyword in the SQL statement of a CREATE or ALTER TABLE, CREATE or ALTER TABLESPACE, or CREATE INDEX statement is not allowed for a space type specified in the database type database.

Programmer Response: Refer to DB2 SQL Reference for information about attributes that are allowed or not allowed for a space type in a database type database. Correct and resubmit the statement.

Destination: 55011

-621  DUPLICATE DBID dbid WAS DETECTED AND PREVIOUSLY ASSIGNED TO database-name

Explanation: The current database being created was assigned a DBID of 'dbid', which is identical to the DBID assigned to database 'database-name'. An inconsistency exists between the DB2 catalog and directory.

System Action: The statement cannot be executed. No new object was created, and the existing object was not altered or modified.

Programmer Response: Notify the system programmer. The inconsistency must be corrected before CREATE DATABASE will be successful.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Destination: 58001

-622  FOR MIXED DATA IS INVALID BECAUSE THE MIXED DATA INSTALL OPTION IS NO

Explanation: FOR MIXED DATA is specified in a column description of a CREATE or ALTER TABLE, CREATE FUNCTION, or a CREATE PROCEDURE statement, but the MIXED DATA install option is set to NO. FOR MIXED DATA is valid only when the MIXED DATA install option is set to YES.

System Action: The statement is not executed.

Programmer Response: Either change the install option or the FOR clause. If the install option is correctly set to NO, the allowable FOR clause options are BIT and SBCS.

Destination: 56031

-623  A CLUSTERING INDEX ALREADY EXISTS ON TABLE table-name

Explanation: The CREATE INDEX statement would create a second cluster index on the specified table. A given table can have only one cluster index.

System Action: The statement cannot be executed.

Programmer Response: Check to determine the identity and validity of the existing cluster index on the object table. Alternatively, consider creating the index without the CLUSTER attribute.

Destination: 55012

-624  TABLE table-name ALREADY HAS A PRIMARY KEY

Explanation: The code is used to report that a primary key cannot be defined in an ALTER TABLE statement because the indicated table already has a primary key.

System Action: The statement cannot be run.

Programmer Response: A table cannot have more than one primary key.

Destination: 42889

-625  TABLE table-name DOES NOT HAVE AN INDEX TO ENFORCE THE UNIQUENESS OF THE PARENT KEY

Explanation: The code is used to report that an ALTER TABLE statement is invalid because the table does not have a unique index with a key that is identical to the nominated PARENT KEY.

System Action: The statement cannot be executed.

Programmer Response: Make sure the key list specified on the ALTER TABLE statement identifies an existing unique index of the table.

Destination: 55014

-626  THE ALTER STATEMENT IS NOT EXECUTABLE BECAUSE THE PAGE SET IS NOT STOPPED

Explanation: An ALTER statement specifies a BUFFERPOOL, USING, PRIQTY, SECQTY, ERASE, or GBPCACHE clause, but the page set is not stopped.

System Action: The SQL statement cannot be executed.

Programmer Response: Stop the page set before resubmitting the statement.

Destination: 55015

-627  THE ALTER STATEMENT IS NOT EXECUTABLE BECAUSE THE PAGESET HAS USER-MANAGED DATA SETS

Explanation: This code is used if a PRIQTY, SECQTY, or ERASE clause is specified, USING STOGROUP is not specified, and the page set has user-managed data sets.

System Action: The SQL statement cannot be executed.

Programmer Response: Verify that the correct table or partition is specified. The primary and secondary space allocation of a user-managed data set cannot be altered by means of an ALTER statement.
The clauses are mutually exclusive.

<Valid return code -628>

Explanation: Mutually exclusive clauses were specified in one or more of the following ways:

- A CREATE TABLESPACE statement contains both the SEGSIZE and NUMPARTS clauses.
- A CREATE TABLESPACE statement contains both the SEGSIZE and LARGE clauses.
- A CREATE TABLESPACE statement contains both the SEGSIZE and MEMBER CLUSTER clauses.
- A CREATE or ALTER TABLESPACE contains both the LOCKPART YES and LOCKSIZE TABLESPACE clauses.
- A 'column-definition' contains both NOT NULL and DEFAULT NULL clauses.
- A 'column-definition' contains both FIELDPROC and DEFAULT clauses.
- A select-statement contains both the update-clause and the FOR FETCH ONLY clause.
- An ALTER TABLE statement contains both a DROP CONSTRAINT clause and either a DROP FOREIGN KEY clause or a DROP CHECK clause.
- A CREATE or ALTER TABLESPACE statement contains both LOCKPART YES and LOCKSIZE TABLESPACE.
- A CREATE TRIGGER statement specifies more than one correlation name for OLD, NEW, OLD_TABLE, or NEW_TABLE. Each of these correlation specifications can appear no more than once in the CREATE TRIGGER statement.
- A CREATE FUNCTION statement contains both a CAST FROM clause and a SOURCE clause.
- A CREATE FUNCTION statement contains both a SOURCE clause and a RETURNS TABLE clause.
- A CREATE FUNCTION statement contains both a SOURCE clause and a clause used to define an external function (For example, EXTERNAL, LANGUAGE, NO SQL).
- A CREATE or ALTER PROCEDURE statement attempts to use the NO WLM ENVIRONMENT and PROGRAM TYPE SUB options. When NO WLM ENVIRONMENT is used, then SECURITY must also be used.
- A CREATE or ALTER PROCEDURE statement attempts to use both NO WLM ENVIRONMENT and either USER or DEFINER for SECURITY. When NO WLM ENVIRONMENT is used, then SECURITY DBZ must also be used.
- A CREATE or ALTER PROCEDURE statement contains both a LANGUAGE REEXX clause, and a PARAMETER STYLE DB2SQL or PARAMETER STYLE JAVA clause.
- An ALTER TABLE statement contains both an ALTER COLUMN clause and a VALIDPROC clause.
- An ALTER TABLE statement contains both an ALTER COLUMN clause and a clause other than the check constraint clause.
- The AS (subselect) clause of a DECLARE GLOBAL TEMPORARY TABLE statement contains both an INCLUDING COLUMN DEFAULTS clause and a USING TYPE DEFAULTS clause.
- A CREATE DATABASE statement contains both the AS WORKFILE clause and the AS TEMP clause.

Programmer Response: Specify one clause or the other in the statement, but not both, then reissue the statement.

<Valid return code -629>

Explanation: The code is used to report that the SET NULL option of the indicated FOREIGN KEY clause is invalid because no column of the key allows null values. The 'name' is the constraint-name specified in the FOREIGN KEY clause or, if a constraint-name was not specified, the first column-name specified in the clause.

System Action: The statement cannot be run.

Programmer Response: Change a column of the key to allow null values or change the delete rule.

<Valid return code -630>

Explanation: Type 1 indexes cannot be created with the WHERE NOT NULL specification.

System Action: The statement cannot be executed.

Programmer Response: Either the index must be created as a type 2 index, or the WHERE NOT NULL specification must not be used.

<Valid return code -631>

Explanation: This code is used to report that the sum of the length attributes of the columns identified in the indicated FOREIGN KEY clause is greater than 255 bytes or the number of columns identified is greater than 64. The 'name' is the constraint-name specified in the FOREIGN KEY clause or, if a constraint-name was not specified, the first column-name specified in the clause.

System Action: The statement cannot be executed.

Programmer Response: The table definition must be modified to conform to the system-imposed limit of the sum of the length attributes of the columns identified in the PRIMARY KEY clause.

<Valid return code -632>

Explanation: This code is used to report that the object of an ALTER TABLE statement cannot be defined as a dependent of the indicated table because either:

- The relationship would form a cycle that would cause the table to be delete-connected to itself.
- The relationship would cause the table to be delete-connected to the indicated table through multiple paths and the delete rule of the existing relationship is SET NULL.
The error is due to the delete rules of existing relationships, not the delete rule specified in the FOREIGN KEY clause of the ALTER TABLE statement.

**System Action:** The statement cannot be executed.

**Programmer Response:** Eliminate the particular FOREIGN KEY clause from the ALTER or CREATE TABLE statement.

**Destination:** 42915

---

**THE DELETE RULE MUST BE `delete-rule`**

**Explanation:** The code is used to report that the `delete-rule` specified in a FOREIGN KEY clause of the ALTER TABLE statement is invalid. The indicated `delete-rule` is required because:

- A self-referencing constraint must have a `delete-rule` of CASCADE or NO ACTION.
- The relationship would cause the table to be delete-connected to the same table through multiple paths and such relationships must have the same `delete-rule`.

**System Action:** The statement cannot be executed.

**Programmer Response:** Change the `delete-rule` in the FOREIGN KEY clause.

**Destination:** 42915

---

**THE DELETE RULE MUST NOT BE CASCADE**

**Explanation:** The code is used to report that the CASCADE delete rule specified in the FOREIGN KEY clause of an ALTER TABLE statement is invalid because:

- The relationship would form a cycle that would cause a table to be delete-connected to itself.
- The relationship would cause another table to be delete-connected to the same table through multiple paths with different delete rules or with a delete rule equal to SET NULL.

**System Action:** The statement cannot be executed.

**Programmer Response:** Change the delete rule.

**Destination:** 42915

---

**THE DELETE RULES CANNOT BE DIFFERENT OR CANNOT BE SET NULL**

**Explanation:** The code is used to report that the delete rules specified in two FOREIGN KEY clauses of the CREATE TABLE statement are invalid because the table would be delete-connected to the same table through multiple paths involving relationships with different delete rules or with delete rules of SET NULL.

**System Action:** The statement cannot be executed.

**Programmer Response:** Change the delete rule.

**Destination:** 42915

---

**THE PARTITIONING KEYS FOR PARTITION `part-num` ARE NOT SPECIFIED IN ASCENDING OR DESCENDING ORDER**

**Explanation:** In the CREATE INDEX or ALTER INDEX statement for the CLUSTER index for a partitioned table (that is, a table residing in a partitioned table space), the partitioning key values specified in the limit key value specifications were not in either ascending or descending order.

**System Action:** The statement cannot be executed. The specified cluster index was not created.

**Programmer Response:** Correct the limit key value specifications in the CREATE INDEX or ALTER INDEX statement for the identified partition so that the limit key values for successive partitions are in strictly ascending or descending order.

**Destination:** 56016

---

**DUPLICATE keyword KEYWORD**

**Explanation:** The SQL statement contains a duplicate specification for the keyword `keyword`.

**System Action:** The statement cannot be executed.

**Programmer Response:** Correct the statement to eliminate all but one specification for the keyword.

**Destination:** 42614

---

**TABLE `table-name` CANNOT BE CREATED BECAUSE COLUMN DEFINITION IS MISSING**

**Explanation:** The CREATE TABLE statement does not contain any column definition.

**System Action:** The SQL statement cannot be executed.

**Programmer Response:** Add column definition to the statement.

**Destination:** 42601

---

**A NULLABLE COLUMN OF A FOREIGN KEY WITH A DELETE RULE OF SET NULL CANNOT BE A COLUMN OF THE KEY OF A PARTITIONED INDEX**

**Explanation:** A partition key of the clustering index cannot be updated. Therefore, a foreign key column with a delete rule of SET NULL cannot be a column of a partition key if that column is nullable. If this error occurs for an ALTER TABLE operation, the foreign key cannot be created. If this error occurs for a CREATE INDEX operation, the index cannot be created.

**System Action:** The statement cannot be executed.

**Programmer Response:** Review the delete rule of the referential constraint and the partition keys for the index. Do one of the following:

- If the operation in error was CREATE INDEX, either change the index partition key definition or drop and redefine the referential constraint with a different delete rule.
- If the operation in error was ALTER TABLE, change the referential delete rule so that all nullable index keys are not part of the foreign keys.

**Destination:** 56027
-640  LOCKSIZE ROW CANNOT BE SPECIFIED BECAUSE TABLE IN THIS TABLESPACE HAS TYPE 1 INDEX
Explanation: If LOCKSIZE ROW is specified for a table space, all indexes on tables in the table space must be type 2 indexes. The following SQL statement identifies all the type 1 indexes:

```
SELECT I.CREATOR, I.NAME
FROM SYSIBM.SYSINDEXES I,
     SYSIBM.SYSTABLES T
WHERE INDEXTYPE = ' ',
  AND T.TSNAME = 'table_space_name'
  AND T.DATABASE = 'database_name'
  AND T.CREATOR = I.TBCREATOR
  AND T.NAME = I.TBNAME;
```

where 'table_space_name' is the name of the table space that is to be altered; 'database_name' is the name of the database that contains the table space.

System Action: The statement cannot be executed.

Programmer Response: Since the LOCKSIZE ROW on the table space and the type 1 indexes conflict, either use the ALTER INDEX statement to convert all type 1 indexes to type 2 indexes or use another LOCKSIZE option.

Destination: 56089

-642  TOO MANY COLUMNS IN UNIQUE CONSTRAINTS
Explanation: There is a limit to the total number of columns that can be used in UNIQUE constraints in a CREATE TABLE statement. The statement exceeds the limit.

System Action: The statement is not executed.

Programmer Response: Change the statement to remove some of the unique constraints. You can impose the same constraints later by creating unique indexes on the table, using CREATE INDEX.

Destination: 54021

-643  CHECK CONSTRAINT EXCEEDS MAXIMUM ALLOWABLE LENGTH
Explanation: The check constraint definition exceeds the maximum allowable limit of 3800 characters. The redundant blank spaces are excluded from this limit.

System Action: The CREATE TABLE or ALTER TABLE statement failed.

Programmer Response: Rewrite the check constraint definition so that it is less than 3800 characters. You might need to divide the check constraint into two or more smaller check constraints.

Destination: 54024

-644  INVALID VALUE SPECIFIED FOR KEYWORD keyword IN stmt-type STATEMENT
Explanation: The value specified for the 'keyword' parameter in the 'stmt-type' SQL statement is not a permitted value.

System Action: The SQL statement cannot be executed.

Programmer Response: Correct the statement. Refer to Chapter 6 of DB2 SQL Reference for information about the permissible values for the 'keyword' keyword in 'stmt-type' statements.

Destination: 42615

-646  TABLE table-name CANNOT BE CREATED IN SPECIFIED TABLE SPACE table-space-name BECAUSE IT ALREADY CONTAINS A TABLE
Explanation: The table space specified in a CREATE TABLE statement is a partitioned, default, or LOB table space in which an existing table already resides. Only one table may reside in a partitioned, default, or LOB table space.

System Action: The statement cannot be executed. The specified table was not created.

Programmer Response: Verify that the correct table space was specified in the CREATE statement. Do not attempt to create more than one table in a partitioned, default, or LOB table space.

Destination: 55017

-647  BUFFERPOOL bp-name CANNOT BE SPECIFIED BECAUSE IT HAS NOT BEEN ACTIVATED
Explanation: The buffer pool specified in a CREATE or ALTER statement for a table space or index (index space) is not activated.

Table spaces and indexes (index spaces) can only be assigned or reassigned to buffer pools that are currently activated.

System Action: The statement cannot be executed. The specified table space or index space was not created or altered.

Programmer Response: Verify that the proper buffer pool was specified in the CREATE or ALTER statement. Use the -DISPLAY BUFFERPOOL command to display the attributes of the buffer pool and determine if the buffer pool is activated. If the buffer pool is not activated, use the -ALTER BUFFERPOOL command to change the VPSIZE from 0 to the desired size.

Destination: 57003

-650  THE ALTER INDEX CANNOT BE EXECUTED, REASON reason
Explanation: The ALTER INDEX statement cannot be executed for one of the following reasons:

1. Alter to type 1 index is not allowed for the index whose associated table space has a LOCKSIZE specification of ROW.

2. Alter to type 1 index is not allowed for the index defined with UNIQUE WHERE NOT NULL.
-651  TABLE DESCRIPTION EXCEEDS MAXIMUM SIZE OF OBJECT DESCRIPTOR.

Explanation: The CREATE TABLE or ALTER TABLE statement causes the table descriptor (record OBD) to exceed the object descriptor size limit of 32KB.

Programmer Response: Change the statement by reducing either the number or length (or a combination of both) of the user-defined default string constants or check constraints and execute the statement again.

System Action: The statement is not executed. For an ALTER TABLE statement, the definition of the table is unchanged. For a CREATE TABLE statement, the table is not created.

Destination: 54025

-652  VIOLATION OF INSTALLATION DEFINED EDIT OR VALIDATION PROCEDURE proc-name

Explanation: The result of the SQL statement has been rejected by the installation defined edit or validation procedure ‘proc-name’ for the object table.

System Action: The statement cannot be executed. The contents of the object table were not modified.

Programmer Response: Determine the requirements imposed by the edit or validation procedure for inserts and updates of the object table.

Destination: 23506

-653  TABLE table-name IN PARTITIONED TABLE SPACE tspace-name IS NOT AVAILABLE BECAUSE ITS PARTITIONED INDEX HAS NOT BEEN CREATED

Explanation: An attempt has been made to insert or manipulate data in or create a view on a partitioned table (that is, a table residing in a partitioned table space) before the partitioned index for that table has been created.

A table residing in a partitioned table space cannot be referenced in any SQL manipulative statement or a CREATE VIEW statement before the partitioned index for that table has been created.

System Action: The statement cannot be executed.

Programmer Response: Verify that the correct table was specified in the statement. If so, ensure that the partitioned index for the table has been created successfully before attempting to execute any SQL manipulative statements that reference that table.

Destination: 57004

-655  THE CREATE OR ALTER STOGROUP IS INVALID BECAUSE THE STORAGE GROUP WOULD HAVE BOTH SPECIFIC AND NON-SPECIFIC VOLUME IDS

Explanation: One of the following error conditions occurred:

- Both a specific and a non-specific (‘*’) volume ID are specified in the VOLUMES clause of a CREATE STOGROUP statement.
- Both a specific and a non-specific (‘*’) volume ID are specified in an ADD VOLUMES clause of an ALTER STOGROUP statement.
- A specific volume ID is specified in an ADD VOLUMES clause of an ALTER of a storage group that has non-specific volume IDs or mixed volume IDs.
- A non-specific volume ID (‘*’) is specified in an ADD VOLUMES clause of an ALTER of a storage group that has specific volume IDs or mixed volume IDs.

System Action: The statement is not executed.

Programmer Response: Specify either specific or non-specific volume IDs in the VOLUMES clause of CREATE STOGROUP statement and the ADD VOLUMES clause of the ALTER STOGROUP statement. To add specific volume IDs to a storage group with non-specific volume IDs, use the REMOVE VOLUMES clause to remove the non-specific volume IDs. To add non-specific volume IDs to a storage group with specific volume IDs, use the REMOVE VOLUMES clause to remove the specific volume IDs.

Destination: 56036

-658  A object-type CANNOT BE DROPPED USING THE STATEMENT

Explanation: A DROP statement was issued, but the object cannot be explicitly dropped. The object must be dropped by dropping an associated object:

TRIGGER PACKAGE
A trigger package cannot be dropped with the DROP PACKAGE statement. A trigger package can only be dropped implicitly when the associated trigger is dropped using the DROP TRIGGER statement.

CAST FUNCTION
A cast function cannot be explicitly dropped with the DROP FUNCTION statement. A cast function can only be dropped implicitly when the associated distinct type is dropped using the DROP DISTINCT TYPE statement.

System Action: The SQL statement cannot be executed.

Programmer Response: Issue the appropriate DROP statement to drop the intended objects.

Destination: 42917
-660  INDEX index-name CANNOT BE CREATED OR ALTERED ON PARTITIONED TABLE SPACE tspace-name BECAUSE KEY LIMITS ARE NOT SPECIFIED

Explanation: The CREATE INDEX or ALTER INDEX statement did not specify limit key values for the partitions of the table space. To create a clustering index for a table in a partitioned table space, or to modify those values using ALTER INDEX, you must include those values.

System Action: The statement cannot be executed. The specified cluster index was not created or altered.

Programmer Response: Verify that the correct table was specified in the CREATE INDEX or ALTER INDEX statement. If so, the definition for the partitioned table space must be examined so that a proper definition for the cluster index for the table may be constructed. Refer to Chapter 6 of DB2 SQL Reference for information about the requirements that must be satisfied by the definitions for the cluster indexes for partitioned tables.

Destination: 53035

-661  INDEX index-name CANNOT BE CREATED ON PARTITIONED TABLE SPACE tspace-name BECAUSE THE NUMBER OF PART SPECIFICATIONS IS NOT EQUAL TO THE NUMBER OF PARTITIONS OF THE TABLE SPACE

Explanation: The CREATE INDEX statement for the cluster index on a partitioned table (that is, a table residing in a partitioned table space) does not contain the same number of PART specifications as there are partitions in the table space. The definition for the cluster index for a partitioned table must contain exactly as many PART specifications as there are partitions in the table space in which that table resides. Also, the part numbers must be valid and unique.

System Action: The statement cannot be executed. The specified cluster index was not created.

Programmer Response: Examine the definition of the partitioned table space to determine how many partitions have been specified, and then correct the syntax of the CREATE INDEX statement to provide the proper number of PART specifications. Refer to Chapter 6 of DB2 SQL Reference for information about the definitions for cluster indexes on partitioned tables.

Destination: 53036

-662  A PARTITIONED INDEX CANNOT BE CREATED ON A NON-PARTITIONED TABLE SPACE tspace-name

Explanation: The CREATE INDEX statement contains PART specifications, but the specified object table is not partitioned (that is, does not reside in a partitioned table space).

System Action: The statement cannot be executed. The specified index was not created.

Programmer Response: Verify that the proper object table was specified in the statement. Refer to Chapter 6 of DB2 SQL Reference for information about the proper usage of PART specifications in CREATE INDEX statements.

Destination: 53037

-663  The number of key limit values is either zero, or greater than the number of columns in the key of index index-name

Explanation: The number of limit key value specifications provided in at least one of the PART specifications of the CREATE INDEX or ALTER INDEX statement is either zero or greater than the number of columns in the index key.

System Action: The statement cannot be executed. The specified index was not created.

Programmer Response: Correct the statement so that each PART specification contains exactly the same number of limit key value specifications as there are columns in the index key.

Destination: 53038

-665  THE PART CLAUSE OF AN ALTER STATEMENT IS OMITTED OR INVALID

Explanation: The ALTER statement is invalid for one of the following reasons:

- The table space or index is not partitioned and the PART clause is specified.
- The table space or index is partitioned, a partition attribute (FREEPAGE or PCTFREE) is specified, and the PART clause is not specified.
- The integer specified in the PART clause does not identify a partition of the table space or index.
- A USING, PRIQTY, SECQTY, or ERASE clause is used to alter storage attributes, but the partition is not specified.
- A GBPCACHE clause is used to alter the group buffer pool caching attributes, but the partition is not specified.
- The VALUES clause is specified without the PART clause. You must specify PART to change VALUES.

System Action: The SQL statement cannot be executed.

Programmer Response: Determine whether the table space or index you want to alter is partitioned. If it is partitioned, specify a PART clause that identifies the partition you want to alter. If it is not partitioned, do not specify the PART clause.

Destination: 53039

-666  stmt-verb object CANNOT BE EXECUTED BECAUSE function IS IN PROGRESS

Explanation: The SQL statement could not be executed because the named function was executing at the time.

stmt-verb The type of data definition language (DDL) statement
object The DB2 object type
function A utility, the governor, or the distributed data facility (DDF)

If the object is part of the communications database, it cannot be dropped while the DDF is active.

System Action: The statement was not executed.

Programmer Response: If the function is a utility, wait for the function to complete or stop. Then resubmit the statement for execution.

If the function is the governor, the statement cannot be executed until the resource limit facility is stopped or switched to a
different resource limit specification table (RLST). In a DB2 data sharing environment, the resource limit facility must be stopped on all members of the DB2 data sharing group or all members must switch to an RLST that is not associated with the object.

If the function is the DDF, the facility must be stopped before the object can be dropped. In a DB2 data sharing environment, the facility must be stopped on all members of the DB2 data sharing group.

**Destination:** 57005

---

**-667** THE CLUSTERING INDEX FOR A PARTITIONED TABLE SPACE CANNOT BE EXPLICITLY DROPPED

**Explanation:** The DROP INDEX statement attempted to drop the cluster index for a table residing in a partitioned table space. The cluster index for such a table cannot be dropped explicitly with the DROP INDEX statement.

**System Action:** The statement cannot be executed. The specified index was not dropped.

**Programmer Response:** The cluster index for a table in a partitioned table space can only be dropped implicitly when the associated partitioned table space is dropped.

**Destination:** 42917

---

**-668** THE COLUMN CANNOT BE ADDED TO THE TABLE BECAUSE THE TABLE HAS AN EDIT PROCEDURE

**Explanation:** The ALTER TABLE statement attempted to add a column to a table that has an edit procedure. If a table has an edit procedure, no columns can be added to it.

**System Action:** The statement cannot be executed. The specified table was not altered.

**Programmer Response:** Verify that the correct table was specified in the ALTER statement. Do not attempt to ALTER the definition of a table that has an installation-written edit procedure associated with it.

**Destination:** 56018

---

**-669** A TABLE IN A PARTITIONED TABLE SPACE CANNOT BE EXPLICITLY DROPPED

**Explanation:** The DROP TABLE statement attempted to drop a table that resides in a partitioned table space.

**System Action:** The statement cannot be executed. The specified table was not dropped.

**Programmer Response:** The table of a partitioned table space can only be dropped implicitly when the table space itself is dropped.

**Destination:** 42917

---

**-670** THE RECORD LENGTH OF THE TABLE EXCEEDS THE PAGE SIZE LIMIT

**Explanation:** The row length for a table cannot exceed the page size of the table space in which that table resides (or is to reside). The page size of the table space is determined by the buffer pool used by that table space.

One of following conditions may occur:

- As defined in a CREATE TABLE statement, the row length for the table would exceed the page size of the specified (or default) table space.
- In the case of an ALTER TABLE statement, addition of the specified column would cause the row length of the table to exceed the page size of the table space.
- In the case of an ALTER TABLE statement used to alter the length of an existing variable length column, the new length of the altered column would cause the row length of the table to exceed the page size of the table space.
- The row length in the result of a join exceeds the page size of a work file table space.

**System Action:** The statement cannot be executed. The object table was not created or altered.

**Programmer Response:** In the case of CREATE TABLE, either (1) the row length of the table must be reduced (by eliminating or reducing the lengths of one or more of the columns), or (2) the table must be assigned to a table space that uses a larger buffer pool (assuming that the row length of the table does not exceed that page size limit).

In the case of ALTER TABLE, either (1) the length of the column to be added to the table must be reduced or, (2) if the row length of the table is already at the maximum, the table cannot be altered to add any additional columns.

In the case of a row length that exceeds the page size of a work file table space, eliminate columns from the result of the join.

**Destination:** 54010

---

**-671** THE BUFFERPOOL ATTRIBUTE OF THE TABLE SPACE CANNOT BE ALTERED AS SPECIFIED BECAUSE IT WOULD CHANGE THE PAGE SIZE OF THE TABLE SPACE

**Explanation:** For example, the change to the buffer pool attribute for the table space specified in the ALTER TABLESPACE statement would change the page size of the table space—either from 4KB to 32KB, 8KB to 16KB, or vice versa.

Use of the ALTER TABLESPACE statement to change the page size of a table space is not permitted.

**System Action:** The statement cannot be executed. The table space definition was not altered.

**Programmer Response:** For example, if the table space uses one of the 4KB buffer pools (for example, BP0, BP1, or BP2), it can be reassigned to one of the other 4KB buffer pools (but not buffer pool BP32K). If, however, it is assigned to buffer pool BP32K, the buffer pool assignment cannot be subsequently altered.

**Destination:** 53040
-672  OPERATION DROP NOT ALLOWED ON TABLE
  table_name

Explanation: The DROP operation failed for one of the following reasons:

- The table being dropped has the RESTRICT ON DROP attribute.
- The table space or database being dropped contains the specified table, which has the RESTRICT ON DROP attribute.

System Action: The DROP statement cannot be executed.

Programmer Response: Before dropping the table, alter the table, specifying DROP RESTRICT ON DROP.

For DROP TABLESPACE or DROP DATABASE, make sure that there are no other tables within the table space or database with the RESTRICT ON DROP attribute. The following SELECT statement can identify the tables:

```
SELECT CREATOR, NAME
FROM SYSIBM.SYSTABLES
WHERE TYPE = 'T'
AND CLUSTERTYPE = 'Y'
AND DBNAME = 'database_name'
AND TSNAME = 'tablespace_name';
```

Destination: 55035

-676  ONLY A 4K PAGE BUFFERPOOL CAN BE USED FOR AN INDEX

Explanation: A buffer pool having a page size other than 4KB was specified in the CREATE INDEX statement. Only 4KB buffer pools (that is, BP0, BP1, and BP2) can be specified for indexes.

System Action: The statement cannot be executed. The specified index was not created.

Programmer Response: Correct the statement to specify a 4KB buffer pool. Refer to Chapter 6 of DB2 SQL Reference for information about the syntax of SQL statements.

Destination: 53045

-677  INSUFFICIENT VIRTUAL STORAGE FOR BUFFERPOOL EXPANSION

Explanation: An attempt to either open (create) or expand a buffer pool has failed because insufficient virtual storage was available.

This error may occur under either of two circumstances:

- An attempt to create a buffer pool while opening a table space or index(space), or
- An attempt to expand a buffer pool from its current size to its maximum size.

System Action: The statement cannot be executed.

Programmer Response: If this error should occur during interactive execution of an SQL statement or execution of an application program, installation administration should be notified.

Installation Action: It may be necessary to reexamine the buffer pool storage strategy.

Destination: 54011

One of the following messages has also been sent to the MVS console: DSNB601I, DSNB603I, or DSNB605I. Refer to "Section 3. DB2 Messages" on page 117 for explanations of these messages.

Destination: 57011

-678  THE LITERAL literal SPECIFIED FOR THE INDEX LIMIT KEY MUST CONFORM TO THE DATA TYPE data-type OF THE CORRESPONDING COLUMN column-name

Explanation: The index limit key value 'literal' has been specified incorrectly in the CREATE INDEX or ALTER INDEX statement.

Limit key value specifications must conform to the data type of the corresponding index key column. In this case, the ‘literal’ must be of data type 'data-type' to conform to the data type of column 'column-name'.

System Action: The statement cannot be executed. The specified index was not created.

Programmer Response: Correct the statement so that each limit key value literal is of precisely the same data type as that of the corresponding index key column.

Destination: 53045

-679  THE OBJECT name CANNOT BE CREATED BECAUSE A DROP IS PENDING ON THE OBJECT

Explanation: The application program has executed a DROP for the specified object, and then tried to re-create an object with the same name (and of the same type) before the DROP was completed.

System Action: The statement cannot be executed. The specified object was not created.

Programmer Response: The logic of the application program must be modified to issue a COMMIT (or the IMS or CICS equivalent) between the DROP and CREATE statements.

Destination: 57006

# -680  TOO MANY COLUMNS SPECIFIED FOR A TABLE, VIEW OR TABLE FUNCTION

Explanation: The maximum number of columns permitted per table, view, or table function is 750. The statement attempted to perform one of the following actions:

- CREATE or ALTER a table to contain more than 750 columns
- CREATE a view with more than 750 columns
- CREATE a table function with more than 750 columns in the RETURNS TABLE clause

System Action: The statement cannot be executed.

Programmer Response: Change the CREATE statement to not include more than 750 columns, or do not try to alter an existing table to contain more than 750 columns.

Destination: 54011
-681  COLUMN column-name IN VIOLATION OF INSTALLATION DEFINED FIELD PROCEDURE.
RT: return-code, RS: reason-code, MSG: message-token

Explanation: An installation field procedure returned an error for 'column-name'. The 'reason-code' and 'message-token' are defined by the field procedure. They may give additional information to help determine the cause of the problem.

Return code  Error
4  Invalid value on encode or decode or invalid column description on define
8  Invalid parameter value
12  Field procedure error on any function

Use 'reason-code' and 'message-token' for additional information.

System Action: The statement cannot be executed.
Programmer Response: If it is not a field procedure error, determine the requirements imposed by the field procedure. If it is a field procedure error, examine the field procedure.

Destination: 23507

-682  FIELD PROCEDURE procedure-name COULD NOT BE LOADED

Explanation: The field procedure 'procedure-name' cannot be loaded.

System Action: The statement cannot be executed.
Programmer Response: The application should either commit or roll back to previous COMMIT. Then, in general, the application should terminate.

Destination: 57010

-683  THE SPECIFICATION FOR COLUMN, DISTINCT TYPE, FUNCTION, OR PROCEDURE data-item CONTAINS INCOMPATIBLE CLAUSES

Explanation: There is an error in the data item specification in a CREATE or ALTER statement. Incompatible specifications are present such as "INTEGER and FOR BIT DATA". The location of the error is given by data-item as follows:

- For a CREATE or ALTER TABLE statement, data-item gives the name of the column containing the error. The error could be an invalid specification of FOR BIT DATA, FOR SBCS DATA, FOR MIXED DATA, or FIELDPROC for column data-item.
- For a CREATE FUNCTION or CREATE PROCEDURE statement, data-item is a token that identifies the area of the problem in the statement. For example, "PARAMETER 3" or "RETURNS" or "CAST FROM".
- For a CREATE DISTINCT TYPE statement, data-item gives the name of the type being defined.

System Action: The statement cannot be executed.
Programmer Response: Correct the SQL statement by removing the incompatible specification.

Destination: 42842

-684  THE LENGTH OF LITERAL LIST BEGINNING string IS TOO LONG

Explanation: The length of the literal list beginning with 'string', excluding insignificant blanks and delimiting parentheses is greater than 255.

System Action: The statement cannot be executed.
Programmer Response: Correct the SQL statement.

Destination: 54012

-685  INVALID FIELD TYPE, column-name

Explanation: The field description returned by the field procedure is invalid. The data type code denotes a long string or has an invalid value.

System Action: The statement cannot be executed.
Programmer Response: Correct the field procedure so that it returns a valid data type code.

Destination: 58002

-686  COLUMN DEFINED WITH A FIELD PROCEDURE CAN NOT COMPARISON WITH ANOTHER COLUMN WITH DIFFERENT FIELD PROCEDURE

Explanation: The columns specified are not compatible. Different field procedures are specified, or only one field procedure is specified.

System Action: The statement cannot be executed.
Programmer Response: Correct the SQL statement. Refer to Chapter 3 of DB2 SQL Reference for comparison restrictions between columns defined with a field procedure.

Destination: 53043

-687  FIELD TYPES INCOMPARABLE

Explanation: One column cannot be compared with another column that has incompatible field types.

System Action: The statement cannot be executed.
Programmer Response: Correct the SQL statement. Refer to Chapter 3 of DB2 SQL Reference for comparison restrictions between columns defined with a field procedure.

Destination: 53044

-688  INCORRECT DATA RETURNED FROM FIELD PROCEDURE, column-name, msgno

Explanation: Unexpected data returned from field procedure for column 'column-name'. For more information see 'msgno'.

System Action: The statement cannot be executed.
Programmer Response: Correct the field procedure so that it returns values that are consistent with their descriptions.

Destination: 58002
-689  TOO MANY COLUMNS DEFINED FOR A DEPENDENT TABLE

Explanation: The maximum number of columns allowed for a dependent table is 749. The code is used to report that the statement is invalid because of one of the following:

- A CREATE TABLE statement is creating a dependent table with 750 columns.
- An ALTER TABLE statement is altering a dependent table with 749 columns to add a column, or altering a table with 750 columns to become a dependent table.

System Action: The statement cannot be executed.

Programmer Response: Correct the SQL statement to conform to the column limit for a dependent table.

Destination: 54011

-690  THE STATEMENT IS REJECTED BY DATA DEFINITION CONTROL SUPPORT. REASON reason-code

Explanation: The code is issued by the data definition control support to report that the statement is rejected for the reason indicated by ‘reason-code’ after consulting the application registration table and object registration table.

The explanation of the given reason code:

- 0001
  Data definition control support is running under the controlling by application name mode. The statement is rejected because the current application is not registered in application registration table with DEFAULTAPPL on.

- 0002
  Data definition control support is running under the controlling by application name with exceptions mode. The statement is rejected because the object is not registered in object registration table and the current application is not registered in application registration table with DEFAULTAPPL on.

- 0003
  Data definition control support is running under the controlling by application name with exceptions mode. The statement is rejected because the object is registered in object registration table but the current application does not match.

- 0004
  Data definition control support is running under the controlling by object name with exceptions mode. The statement is rejected because the object is registered in object registration table but the current application does not match.

- 0005
  Data definition control support is running under the controlling by object name mode. The statement is rejected because the object is registered in object registration table but the current application does not match.

- 0006
  Data definition control support is running under the controlling by object name mode. The statement is rejected because the object is not registered in object registration table.

System Action: The statement cannot be executed.

Programmer Response: None if valid rejection. Otherwise, check to see if data definition control support is running under the desired mode. Check one or both registration table(s) to determine if the entries of the registration table(s) are correct. If they are not, then update the registration table(s).

Destination: 23508

-691  THE REQUIRED REGISTRATION TABLE table-name DOES NOT EXIST

Explanation: The data definition control support assumes the existence of the application registration table and object registration table. But either one or both tables is not defined.

System Action: The statement cannot be executed.

Programmer Response: Determine whether the required registration tables do exist. If not, create the required tables.

Destination: 57018

-692  THE REQUIRED UNIQUE INDEX index-name FOR DDL REGISTRATION TABLE table-name DOES NOT EXIST

Explanation: A unique index must be defined for each registration table. The code is issued when either the required index does not exist or the index defined is not a unique index.

System Action: The statement cannot be executed.

Programmer Response: Determine whether the required unique index does exist. If not, create the required index. If the index does exist, but is not unique, drop it and recreate it as a unique index.

Destination: 57018

-693  THE COLUMN column-name IN DDL REGISTRATION TABLE OR INDEX table-name (index-name) IS NOT DEFINED PROPERLY

Explanation: An error occurred during verification of the application or object registration table.

The table is improperly defined for the following reasons:

- A required column is missing.
- A column description is invalid because its name, column number, data type, length, or null attribute is incorrect.

or

The index is improperly defined for the following reasons:

- A required key column is missing.
- A key column description is invalid because of its key sequence or because its ordering is incorrect.
- A defined key column should not be part of the unique key.

System Action: The statement cannot be executed.

Programmer Response: Correct or alter the definition of the required registration table or index.

Destination: 55003
-694  THE DDL STATEMENT CANNOT BE EXECUTED BECAUSE A DROP IS PENDING ON THE DDL REGISTRATION TABLE  table-name  
Explanation: An error occurred while accessing the application registration table or object registration table. The application registration table or object registration table was dropped, but the DROP statement was not committed.  
System Action: The statement cannot be executed.  
Programmer Response: If the same error happens, check for the application that issued the DROP statement for the application registration table or the object registration table. Either commit the DROP statement which dropped the table and create a new application registration table or object registration table, or issue a ROLLBACK for the DROP statement to put the tables back.  
Destination:  57023  

-696  THE DEFINITION OF TRIGGER  trigger-name  INCLUDES AN INVALID USE OF CORRELATION NAME OR TRANSITION TABLE NAME  name.  REASON CODE=reason-code  
Explanation: The trigger definition included an invalid use of name  
trigger-name  The trigger that encountered the error  
name  The transition variable correlation name or transition table name  
reason-code  A reason-code indicating the specific problem as follows:  
1. NEW correlation name and NEW_TABLE name are not allowed in a DELETE trigger.  
2. OLD correlation name and OLD_TABLE name are not allowed in an INSERT trigger.  
3. OLD_TABLE name and NEW_TABLE name are not allowed in a BEFORE trigger.  
System Action: The statement cannot be executed. The trigger was not created.  
Programmer Response: Remove the invalid correlation name or transition table name along with the preceding keyword.  
Destination:  42898  

-697  OLD OR NEW CORRELATION NAMES ARE NOT ALLOWED IN A TRIGGER DEFINED WITH THE FOR EACH STATEMENT CLAUSE. OLD_TABLE OR NEW_TABLE NAMES ARE NOT ALLOWED IN A TRIGGER WITH THE BEFORE CLAUSE.  
Explanation: The trigger, as defined, includes a REFERENCING clause with one of the following invalid combinations:  
• OLD or NEW correlation names specified (or both) and the FOR EACH STATEMENT clause.  
• NEW_TABLE or OLD_TABLE correlation names specified (or both) and the BEFORE clause.  
System Action: The statement cannot be executed. The trigger was not defined.  
Programmer Response: Remove invalid correlation names or change the trigger granularity to FOR EACH ROW.  
Destination:  42899  

-713  THE REPLACEMENT VALUE  value  FOR special-register  IS INVALID  
Explanation: The value specified in the SET special-register statement is not a valid value of the indicated special register.  
System Action: The statement cannot be executed.  
Programmer Response: Correct the replacement value. See DB2 SQL Reference for an explanation of the valid values of each special register.  
Destination:  42815  

-715  PROGRAM  program-name  WITH MARK  release-dependency-mark  FAILED BECAUSE IT DEPENDS ON FUNCTIONS OF THE RELEASE FROM WHICH FALLBACK HAS OCCURRED  
Explanation: Program 'program-name' depends on a function of DB2 that is not supported by the current active release.  
program-name  Name of the application program.  
release-dependency-mark  A 1-character mark showing the oldest DB2 release supporting this program.  
System Action: The BIND operation for this plan or package is not performed.  
User Response: The program cannot be used until the DB2 subsystem is remigrated to the newer release.  
Operator Response: Notify the system programmer.  
System Programmer Response: Warn users not to use plans or packages containing this program until the DB2 subsystem has been remigrated to the newer release.  
Destination:  56064  

-716  PROGRAM  program-name  PRECOMPILED WITH INCORRECT LEVEL FOR THIS RELEASE  
Explanation: Program 'program-name' was precompiled under a release not supported by the current level of DB2, or the contents of the DBRM have been modified after the precompilation phase.  
User Response: Precompile the named program again using the current precompiler. Reissue the BIND subcommand.  
Problem Determination: If the program was precompiled at an appropriate release, and the problem persists, collect the following:  
• A hexadecimal print of the first record of the failing DBRM  
• The listing from the precompile job that generated the DBRM  
• Output from the BIND attempt.  
Destination:  56065
-717  **bind-type FOR object-type object-name WITH MARK release-dependency-mark FAILED**  
**BECAUSE object-type DEPENDS ON FUNCTIONS OF THE RELEASE FROM WHICH FALLBACK HAS OCCURRED**

**Explanation:** The plan or package indicated depends on a function of DB2 which is not supported by the currently active release.

- **bind-type** REBIND
- **object-type** PLAN | PACKAGE
- **object-name** Name of the application plan, or the package
- **release-dependency-mark** A one-character mark showing the oldest release of DB2 can support this plan or package. The release dependency mark for the plan is kept in the IBMREQD columns in the DB2 catalog in SYSIBM.SYSPLAN (plans), SYSIBM.SYSPACKAGE (packages).

**System Action:** The REBIND operation for this plan or package is not performed.

**User Response:** The plan or package cannot be used until the DB2 subsystem is remigrated to the newer release.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Warn users not to use the plan or package until the DB2 subsystem has been remigrated to the newer release.

**Destination:** 56066

-718  **REBIND OF PACKAGE package-name FAILED BECAUSE IBMREQD OF ibmreqd IS INVALID**

**Explanation:** The IBMREQD column of the SYSIBM.SYSPACKAGE catalog table for the named package contains an unrecognizable character.

- **package-name** Name of the package (location.collection.package.version)

**System Action:** The REBIND failed.

**User Response:** You must do a BIND ACTION(REPLACE) for this package.

**Destination:** 56067

-719  **BIND ADD ERROR USING auth-id AUTHORITY PACKAGE package-name ALREADY EXISTS**

**Explanation:** An attempt is made to add a package that already exists. The combination of 'location.collection.package.version' must be unique in the SYSIBM.SYSPACKAGE table. In addition, the combination of 'location.collection.package.consistency-token' must be unique.

- **auth-id** Authorization ID of the invoker of the BIND subcommand.
- **package-name** Name of the package (location.collection.package.version).

**System Action:** No package is created.

**System Programmer Response:** Check the SYSIBM.SYSPACKAGE catalog table for names of existing application packages. Re-invoke the BIND subcommand with a 'location.collection.package.version' that is not in use.

**Destination:** 42710

-720  **BIND ERROR, ATTEMPTING TO REPLACE PACKAGE = package_name WITH VERSION = version2 BUT THIS VERSION ALREADY EXISTS**

**Explanation:** An attempt is made to create a version of a package that already exists. The version specified in the REPLVER keyword is different from the version specified for the precompile. The version specified for the precompile already exists in the catalog. The combination of 'location.collection.package.version' must be unique in the SYSIBM.SYSPACKAGE catalog table. A common mistake is that the user may believe that the version he is creating is the one specified in the REPLVER keyword. This is not the case. The version specified in the REPLVER keyword is the name of the version being replaced. The version that will be created is the version that was given to the program when it was precompiled.

- **package_name** Fully qualified package name
- **version2** Version-id of package that is to be created

**System Action:** The bind will fail.

**System Programmer Response:** There are two approaches to solve this problem. The first is to precompile the program again with a new version name and reissue the original BIND subcommand. The other approach is not to do the precompile but reissue the BIND subcommand with REPLVER(SAME).

**Destination:** 42710

-721  **BIND ERROR FOR PACKAGE = pkg-id CONTOKEN = 'contoken'X IS NOT UNIQUE SO IT CANNOT BE CREATED**

**Explanation:** An attempt is made to add or replace a package with a consistency token that is not unique for that package. In other words, the combination of 'location.collection.package.consistency-token' already exists. The following SQL statement can be used to query the catalog:

```
SELECT COLLID, NAME FROM loc-id.SYSIBM.SYSPACKAGE WHERE HEX(CONTOKEN) = 'contoken';
```

- **pkg-id** Fully qualified name of the package.
- **contoken** Consistency token in hexadecimal.

**System Action:** The BIND will fail.

**System Programmer Response:** Check the SYSIBM.SYSPACKAGE catalog table for names of existing application packages with the indicated consistency token. Reissue the BIND subcommand such that the 'location.collection.package.consistency-token' is unique within the catalog.

**Destination:** 42710
-722  bind-type  ERROR  USING  auth-id  AUTHORITY
   PACKAGE  package-name  DOES  NOT  EXIST

Explanation: The indicated subcommand was issued against a package that does not exist. The individual variable fields contain:

bind-type      Type of bind subcommand (BIND | REBIND | FREE).
auth-id        Authorization ID of the invoker of the BIND subcommand.
package-name   Name of the package
                (location.collection.package.version)

System Programmer Response: Check the SYSPACKAGE catalog table for the correct 'location.collection.package.version' to use.

Destination: 42704

-723  AN  ERROR  OCCURRED  IN  A  TRIGGERED SQL  STATEMENT  IN  TRIGGER  trigger-name
   SECTION  NUMBER  section-number,  INFORMATION  RETURNED:  SQLCODE  sqlerror
   SQLSTATE  sqlite,  AND  MESSAGE  TOKENS
   token-list

Explanation: During execution of an UPDATE, INSERT, or DELETE statement, a trigger was activated. One of the triggered SQL statements received an SQL error condition.

trigger-name   The trigger that was activated when the error occurred.
section-number The section number associated with the failing triggered SQL statement. For triggers that contain a WHEN clause, the WHEN clause is section number one. The triggered SQL statements are numbered sequentially, beginning with section number two. This is true for triggers with or without a WHEN clause.
sqlcode        The SQLCODE received by the activated trigger.
sqlstate       The corresponding SQLSTATE for the SQLCODE received by the activated trigger.
token-list     The list of tokens from the original SQL error. This list might be truncated.

System Action: The trigger and the original INSERT, UPDATE, or DELETE statement cannot be processed. The triggering table is unchanged.

Programmer Response: Contact your Database Administrator to determine why the trigger named in the message received the error.

System Programmer Response: Use the trigger name and section number to determine the failing SQL statement. If the trigger definition is available, use the section number to determine the failing statement. Alternatively, the failing statement can be retrieved from the SYSIBM.SYSPACKSTMT catalog table: SELECT TEXT, SEQNO FROM SYSIBM.SYSPACKSTMT WHERE COLLID = 'schema-name' AND NAME = 'trigger-name' AND SECTNO = section-number ORDER BY SEQNO Refer to the explanation of the reported SQLCODE. Follow the action suggested by that SQLCODE.

Destination: 09000

-724  THE  ACTIVATION  OF  THE  object-type  OBJECT
   object-name  WOULD  EXCEED  THE  MAXIMUM LEVEL  OF  INDIRECT  SQL  CASCADING

Explanation: Cascading of indirect SQL occurs when a trigger, user-defined function or stored procedure invokes another trigger, user-defined function or stored procedure which in turn invokes another. The activation of some of the triggers in this chain might be due to the enforcement of referential constraint delete rules. The depth of this cascading is limited to 16.

Note that recursive situations where a trigger includes a triggered SQL statement that directly or indirectly causes the same trigger to be activated are very likely to cause this error. The trigger should contain logic to check for a terminating condition to prevent this error.

object-type    Names the type of object being called. Object type is TRIGGER, FUNCTION, or PROCEDURE.
object-name    Specifies the name of the trigger, user-defined function or stored procedure that would have been activated at the seventeenth level of cascading.

System Action: The original statement could not be executed. All SQL statements executed by all triggers, user-defined functions, and stored procedures in the cascade chain are rolled back. External actions performed by the indirect SQL such as sending a network message might have already occurred.

Programmer Response: Start with the indirect SQL that is activated by the original SQL operation. Check for recursive patterns in any invoked user-defined functions or in any triggers defined on the subject of an update operation. If the chain is not recursive, the cascade chain must be simplified by altering the triggers, user-defined functions, or stored procedures involved.

Destination: 54038

-725  THE  SPECIAL  REGISTER  register  AT
   LOCATION  location  WAS  SUPPLIED  AN INVALID  VALUE

Explanation: DB2 received a SET statement with an invalid value. Valid SETs might be allowed or retained. Further processing stops at the named site until the SET statement is corrected.

System Action: All SQL statements at the named remote site are rejected until the SET statement that was in error is corrected.

Programmer Response: The SET statement should be reissued with a valid value. This situation can be corrected with a local SET statement or with a DRDA SET statement executed at the remote site. Once the special register has been supplied a valid value, the application can resume execution.

Destination: 42721
-726  BIND ERROR ATTEMPTING TO REPLACE PACKAGE <package_name>. THERE ARE ENABLE OR DISABLE ENTRIES CURRENTLY ASSOCIATED WITH THE PACKAGE

Explanation:  The BIND subcommand was issued to replace a package that has ENABLE or DISABLE entries currently associated with the package.

System Action:  Package not bound.

System Programmer Response:  FREE the package first and then BIND the package.

Destination:  55030

-728  DATA TYPE data-type IS NOT ALLOWED IN DB2 PRIVATE PROTOCOL PROCESSING

Explanation:  An SQL statement uses a data type that cannot be used with DB2 private protocol. Data types such as LOBs (large objects), row IDs and user defined types cannot be accessed using DB2 private protocol.

System Action:  The statement cannot be executed.

Programmer Response:  If this is an invalid data type, correct the statement. If this is a valid (but disallowed) data type, you can:

• Remove access to the data type listed, and re-execute the statement.

• Change the application program so that DRDA is used to access the data.

• BIND the package containing the statement to the remote site with bind option DBPROTOCOL(DRDA) and rerun the program.

Refer to the DB2 SQL Reference for more information.

Destination:  56080

-729  A STORED PROCEDURE SPECIFYING COMMIT ON RETURN CANNOT BE THE TARGET OF A NESTED CALL STATEMENT

Explanation:  A stored procedure defined with the COMMIT ON RETURN attribute was called from a stored procedure, user-defined function, or trigger. Stored procedures defined with COMMIT ON RETURN cannot be nested in this way.

System Action:  The SQL statement is not executed. If the CALL statement references a remote server, the unit of work is placed in a must rollback state.

Programmer Response:  Remove the CALL to the stored procedure that was defined with the COMMIT ON RETURN attribute.

Destination:  429B1

-730  THE PARENT OF A TABLE IN A READ-ONLY SHARED DATABASE MUST ALSO BE A TABLE IN A READ-ONLY SHARED DATABASE

Explanation:  An attempt was made to define a relationship between a table in a read-only shared database and a table that is not.

System Action:  The statement cannot be executed.

Programmer Response:  Insure that the correct tables are being used for the relationship being defined.

Destination:  56056
-734  THE ROSHARE ATTRIBUTE OF A DATABASE CANNOT BE ALTERED FROM ROSHARE READ

Explanation:  An attempt was made to ALTER a database from ROSHARE READ to either ROSHARE OWNER or ROSHARE NONE.

System Action:  The statement cannot be executed.

Programmer Response:  Verify that the correct database was specified on the ALTER DATABASE statement. The ROSHARE attribute of a read-only shared database cannot be altered. To change this, DROP and recreate the database.

Destination:  56057

-735  DATABASE dbid CANNOT BE ACCESSED BECAUSE IT IS NO LONGER A SHARED DATABASE

Explanation:  An attempt was made to access an object in the database identified by 'dbid', that is known to the system as having the ROSHARE READ attribute. The database, however, is no longer defined as ROSHARE OWNER on the owning subsystem.

System Action:  The statement cannot be executed.

Programmer Response:  Verify that the correct object is specified on the statement.

Destination:  55004

-736  INVALID OBID obid SPECIFIED

Explanation:  An invalid OBID value was given on the CREATE statement. The OBID is invalid for one of the following reasons:

- The specified OBID does not fall within the acceptable range for OBIDs, which is 1 to 32767.
- The specified OBID is already in use for the given database.

System Action:  The statement cannot be executed.

Programmer Response:  Verify that the given OBID is a valid value for an OBID. If so, ensure that the OBID is correct for the object to be created, then query the catalog to find the object that is already defined as having the same OBID in the database. If an invalid OBID was given for the object to be created, correct the statement and execute it again. If the existing object is in error, then DROP and CREATE that object using the correct OBID value.

It is possible that the OBID "in use" is the OBID for an object that had been previously dropped. If that is the case, and the CREATE was issued for a table in a non-ROSHARE READ database, then select a different OBID for use in the OBID clause. If the object had been previously dropped and the CREATE was issued for a table in a ROSHARE READ database, COMMIT and re-submit the CREATE TABLE request.

Destination:  53014

-737  IMPLICIT TABLE SPACE NOT ALLOWED

Explanation:  A CREATE TABLE statement was issued using an implicit table space. An implicit table space may not be used in a database that has been defined as a read-only shared database.

System Action:  The statement cannot be executed.

Programmer Response:  CREATE a table space for the table, using the same name as is given on the owning system. Then resubmit the CREATE TABLE statement.

Destination:  56056

-739  CREATE FUNCTION function-name FAILED BECAUSE FUNCTIONS CANNOT MODIFY DATA WHEN THEY ARE PROCESSED IN PARALLEL.

Explanation:  The function cannot be created because ALLOW PARALLEL and MODIFIES SQL DATA were both specified explicitly or implicitly. A function cannot be parallelized if it modifies data.

System Action:  The statement cannot be executed.

Programmer Response:  Specify DISALLOW PARALLEL or change the MODIFIES SQL DATA to NO SQL, CONTAINS SQL or READS SQL DATA.

Destination:  56088

-740  FUNCTION name IS DEFINED WITH THE OPTION MODIFIES SQL DATA WHICH IS NOT VALID IN THE CONTEXT IN WHICH IT WAS INVOKED

Explanation:  A user-defined function defined with MODIFIES SQL DATA is only allowed in:

- VALUES clause of an INSERT statement
- SET clause of an UPDATE statement
- VALUES statement in a trigger
- SET assignment statement
- CALL procedure statement

System Action:  The SQL statement failed.

Programmer Response:  Remove the UDF from the failing statement or remove the MODIFIES SQL DATA option from the definition of the function.

Destination:  51034

# -741  A database-type DATABASE IS ALREADY DEFINED FOR MEMBER member-name

# Explanation:  A CREATE DATABASE statement was issued for a WORK FILE or TEMP database, but the database cannot be created because one is already defined for the named DB2 subsystem or data sharing group member.

# database-type WORK FILE or TEMP

# member-name Name of the DB2 subsystem or data sharing group member that already has a database-type database.

# System Action:  The statement cannot be executed.

# Programmer Response:  Verify the identity and validity of the existing database-type database for the named DB2 subsystem or data sharing group member. The existing database can be
altered or dropped if necessary. If the existing database is dropped, resubmit the CREATE DATABASE statement.

**Destination:** 55020

### -742 DSNDDB07 IS THE IMPLICIT WORK FILE DATABASE

**Explanation:** The WORKFILE clause cannot be used on a CREATE DATABASE statement to create a work file database for a DB2 subsystem that is not a member of a DB2 data sharing group. The system database, DSNDDB07, is the implicit work file database.

**System Action:** The statement cannot be executed.

**Programmer Response:** To create the work file database for a DB2 subsystem that is not a member of a DB2 data sharing group, create database DSNDDB07 without the WORKFILE clause.

**Destination:** 53004

### -746 THE SQL STATEMENT IN AN EXTERNAL FUNCTION, TRIGGER, OR IN STORED PROCEDURE name VIOLATES THE NESTING SQL RESTRICTION

**Explanation:** If a table is being modified (by INSERT, DELETE or UPDATE), the table can not be accessed by the lower level nesting SQL statement.

If any table is being accessed by a SELECT statement, no table can be modified (by INSERT, DELETE or UPDATE) in any lower level nesting SQL statement.

**System Action:** The SELECT, INSERT, DELETE or UPDATE SQL statement failed.

**Programmer Response:** Remove the failing statement from the named external function, trigger or the stored procedure.

**Destination:** 57053

### -747 TABLE table-name IS NOT AVAILABLE UNTIL THE AUXILIARY TABLES AND INDEXES FOR ITS EXTERNALLY STORED COLUMNS HAVE BEEN CREATED

**Explanation:** An attempt was made to access or reference a table with one or more LOB columns, however either:

- an auxiliary table for storing one of the LOB columns has not been created, or
- an index has not been created for an auxiliary table, or
- there is not an auxiliary table for each partition of the table space.

**System Action:** The statement was not executed.

**Programmer Response:**
1. Use CREATE TABLESPACE to create a LOB table space.
2. Use CREATE TABLE to create the auxiliary table for storing the column.
3. Use CREATE INDEX to create an index on the auxiliary table.
4. Resubmit the statement that failed.

**Destination:** 57054

### -748 AN INDEX ALREADY EXISTS ON AUXILIARY TABLE table-name

**Explanation:** The CREATE INDEX statement would create a second index on the specified auxiliary table. An auxiliary table can have only one index.

**System Action:** The statement cannot be executed.

**Programmer Response:** An index already exists. Another index cannot be created.

**Destination:** 54042

### -750 THE SOURCE TABLE source-name CANNOT BE RENAMED BECAUSE IT IS REFERENCED IN EXISTING VIEW DEFINITIONS OR TRIGGER DEFINITIONS

**Explanation:** The source table in a RENAME statement cannot be renamed because it is referenced in one or more existing view definitions or it is referenced as the triggering table in one or more existing triggers. The table has check constraints defined.

**System Action:** The statement cannot be executed.

**Programmer Response:** Change the source name to the name of an object that can be renamed and reissue the statement. Drop any triggers defined on the table before issuing the RENAME statement. These can be found by querying the system catalog: SELECT * FROM SYSCI.STRIGGERS WHERE TBNAME = 'source-name'

**Destination:** 42986

### -751 object-type object-name (SPECIFIC NAME specific name) ATTEMPTED TO EXECUTE AN SQL STATEMENT THAT IS NOT ALLOWED

**Explanation:** A stored procedure or user-defined function attempted to execute an SQL statement that is not allowed.

**Stored procedure**
A stored procedure issued an SQL statement that forced the DB2 thread to roll back the unit of work. The SQL statement that caused the thread to be placed in the MUST_ROLLBACK state is one of the following:

```
COMMIT
ROLLBACK
```

All further SQL statements are rejected until the SQL application that issued the SQL CALL statement rolls back the unit of work. When control returns to the SQL application that issued the SQL CALL statement, the SQL application must roll back the unit of work. This can be done by issuing an SQL ROLLBACK statement or the equivalent IMS or CICS operation.

**User-defined function**
External function object-name issued one of the following SQL statements:

```
COMMIT
ROLLBACK
```

**System Action:** The statement cannot be executed.

**Programmer Response:** Remove the unsupported statement from your stored procedure or user-defined function.

**Destination:** 38003
-752  THE CONNECT STATEMENT IS INVALID
BECAUSE THE PROCESS IS NOT IN THE
CONNECTABLE STATE

Explanation: The application process attempted to execute a
CONNECT statement while in the unconnectable state. See
the description of the CONNECT statement in the DB2 SQL
Reference for an explanation of connection states.

System Action: The statement cannot be executed. The con-
nection state of the application process is unchanged.

Programmer Response: Modify the application program to
execute a commit or rollback operation prior to executing the
CONNECT statement.

Destination: 0A001

-763  INVALID TABLE SPACE NAME table-space-
name

Explanation: The named table space is invalid for one of the
following reasons:

• It is a LOB table space and therefore cannot reside in a
work file database.
• It is a LOB table space and therefore cannot contain a
non-auxiliary table.
• It is not a LOB table space and therefore cannot contain
an auxiliary table.

System Action: The statement cannot be executed.

Programmer Response: Either

• Create the LOB table space in a non-work file database.
• Create the table in a non-LOB table space.
• Create the auxiliary table in a LOB table space.

Destination: 560A1

-764  A LOB TABLE SPACE AND ITS ASSOCIATED
BASE TABLE SPACE MUST BE IN THE SAME
DATABASE

Explanation: An attempt was made to create an auxiliary
table in a LOB table space that is not in the same database as
the associated base table space.

System Action: The statement cannot be executed.

Programmer Response: Correct the statement to specify a
LOB table space in the same database as the associated base
table space.

Destination: 560A2

-765  TABLE IS NOT COMPATIBLE WITH DATA-
BASE

Explanation: A CREATE TABLE or ALTER TABLE statement
defines a LOB column in a table whose database attribute is
ROSHARE OWNER or ROSHARE READ. This is not per-
mitted.

System Action: The statement is not executed.

Programmer Response: If CREATE TABLE, either assign
the table to an ROSHARE NONE database or create the table
without a LOB column. If ALTER TABLE, redefine the column
as a non-LOB column or move the table to an ROSHARE
NONE database.

Destination: 560A3

-766  THE OBJECT OF A STATEMENT IS AN AUXIL-
IARY TABLE FOR WHICH THE REQUESTED
OPERATION IS NOT PERMITTED

Explanation: An auxiliary table was named in one of the fol-
lowing statements:

• ALTER TABLE
• CREATE ALIAS
• CREATE FUNCTION
• CREATE SYNONYM
• CREATE VIEW
• DELETE
• DESCRIBE TABLE
• INSERT
• SELECT
• UPDATE

There are no attributes of an auxiliary table that can be altered.

Aliases and synonyms cannot be created on an auxiliary table.
Data in an auxiliary table cannot be accessed by specifying the
auxiliary table name in the SELECT, INSERT, DELETE,
UPDATE, CREATE PROCEDURE, or CREATE FUNCTION
statement. Data in an auxiliary table can only be accessed
through operations on the base table columns.

System Action: The statement cannot be executed.

Programmer Response: Correct the statement to specify the
 corresponding base table instead of the auxiliary table and
resubmit the statement.

Destination: 560A4

-767  MISSING OR INVALID COLUMN SPECIFICA-
TION FOR INDEX index-name

Explanation: The CREATE INDEX statement failed for one of the
following reasons:

• An index on a non-auxiliary table must specify the columns
on which the index is defined.
• An index on an auxiliary table must not have a column
specification.

System Action: The statement cannot be executed.

Programmer Response: Correct the syntax of the CREATE
INDEX statement.

• To create an index on a non-auxiliary table, specify the
columns on which the index is defined.
• To create an index on an auxiliary table, do not specify the
name of any column.

Destination: 42626

-768  AN AUXILIARY TABLE ALREADY EXISTS FOR
THE SPECIFIED COLUMN OR PARTITION

Explanation: An attempt was made to create an auxiliary
table, but an auxiliary table for the specified column or partition
already exists. When the base table belongs to a non-
partitioned table space, there can be only one auxiliary table
per LOB column of the table. When the base table belongs to
a partitioned table space, for any given LOB column, all values
of the LOB column for a given partition are stored in their own
auxiliary table. There must be one auxiliary table per partition
of the base table space.

System Action: The statement is not executed.
-769 SPECIFICATION OF CREATE AUX TABLE DOES NOT MATCH THE CHARACTERISTICS OF THE BASE TABLE

Explanation: Either an attempt was made to create an auxiliary table
- using the PART clause and the specified base table is not partitioned or
- without using the PART clause and the specified base table is partitioned

If the base table is not partitioned, then the PART keyword is not allowed on the CREATE AUXILIARY TABLE statement. If the base table is partitioned, then the PART keyword must be specified.

System Action: The auxiliary table was not created.

Programmer Response: Check the correct table name, column name, and if applicable, partition number have been specified. If a different name is desired for the existing auxiliary table, the RENAME TABLE statement can be used to rename the auxiliary table.

Destination: 560A5

-770 TABLE table-name CANNOT HAVE A LOB COLUMN UNLESS IT ALSO HAS A ROWID COLUMN

Explanation: An attempt was made to create a table with a LOB column or to add a LOB column to a table, but the table does not have a ROWID column. A table with a LOB column must also have a ROWID column.

System Action: The statement was not executed.

Programmer Response: If creating a table with a LOB column, define a column with type ROWID in the same table. If using ALTER to add a LOB column to a table, first use ALTER to add a column with type ROWID to the table.

Destination: 530A6

-771 INVALID SPECIFICATION OF A ROWID COLUMN

Explanation: For an ALTER or CREATE TABLE statement, the specification of a ROWID column might be invalid for one of the following reasons:
- A ROWID column cannot be added to a temporary table.
- The referential-constraint clause cannot specify a ROWID column as a column of a foreign key.
- A ROWID column cannot be a column of a primary key.
- A ROWID column cannot be a column in a table with an EDITPROC.

System Action: The statement cannot be executed.

Programmer Response: Correct the syntax and resubmit the statement.

Destination: 428C7

-797 ATTEMPT to CREATE TRIGGER trigger-name WITH AN UNSUPPORTED TRIGGERED SQL STATEMENT

Explanation: The trigger definition includes an unsupported triggered SQL statement. The SQL statements allowed as a triggered SQL statement depend on the type of trigger:
- A BEFORE trigger can include the following triggered SQL statements:
  - a fullselect or VALUES statement
  - a SET transition-variable statement (not allowed in a BEFORE DELETE trigger)
  - a SIGNAL SQLSTATE statement
  - a CALL statement
- An AFTER trigger can include the following triggered SQL statements:
  - a fullselect or VALUES statement
  - an INSERT statement
  - a searched UPDATE statement
  - a searched DELETE statement
  - a SIGNAL SQLSTATE statement
  - a CALL statement

System Action: The CREATE TRIGGER statement cannot be executed, and the trigger is not created.

Programmer Response: Check the triggered SQL statements in the trigger for any statement that is not listed above and remove it.

Destination: 42987

-798 YOU CANNOT INSERT A VALUE INTO A COLUMN THAT IS DEFINED WITH THE OPTION GENERATED ALWAYS COLUMN

Explanation: When inserting into a table, a value was specified for column column-name with the GENERATE ALWAYS attribute. GENERATED ALWAYS columns should not be specified in the column-list for an insertion unless the corresponding entry in the VALUES list is DEFAULT.

System Action: The INSERT is not performed.

Programmer Response: Remove the column from the column-list or specify DEFAULT for the GENERATED ALWAYS column in the VALUES clause.

Destination: 426C9

-802 EXCEPTION ERROR exception-type HAS OCCURRED DURING operation-type OPERATION ON data-type DATA, POSITION position-number

Explanation: An exception error has occurred in the processing of an SQL arithmetic function or arithmetic expression. This error may be indicated by exception-type. Possible values for exception-type are FIXED POINT OVERFLOW, DECIMAL OVERFLOW, ZERO DIVIDE, DIVIDE EXCEPTION, EXPONENT OVERFLOW, or OUT OF RANGE. The exception error occurred in one of the following areas:
- In the SELECT list of an SQL SELECT statement.
In the search condition of a SELECT, UPDATE, or DELETE statement.
- In the SET clause of the UPDATE statement.
- Found during the evaluation of a column function.

Data-type may indicate the data types of the items being manipulated. Possible values for data-type are INTEGER, SMALLINT, DECIMAL, and FLOAT. The data type displayed in the message may indicate the data type of the temporary internal copy of the data, which may differ from the actual column or literal data type due to conversions by DB2.

Operation-type may indicate the arithmetic operation that was being performed at the time of the error. The possible operation-types are ADDITION, SUBTRACTION, MULTIPLICATION, DIVISION, NEGATION, BUILT-IN FUNCTION, COLUMN FUNCTION, and JAVA CONVERSION.

Position-number may indicate the position of the expression in a SELECT list if the error was in the SELECT list of an outer SELECT statement.

Note: Parts of exception-type, data-type, operation-type, and/or position-number may not be returned to the SQL communication area, depending on where the error was detected.

System Action: The statement cannot be executed. In the case of an INSERT or UPDATE statement, no data is updated or deleted. If the statement was a cursor-controlled FETCH, then the CURSOR will remain open unless the exception occurred while processing a column function (indicated by operation-type of COLUMN FUNCTION), in which case the CURSOR will be closed. If the CURSOR is closed, subsequent attempts to use that cursor without first doing an OPEN for it receive an SQLCODE -501. If the statement was a cursor-controlled OPEN then the CURSOR will remain closed.

Programmer Response: Examine the SQL statement to see if the cause of the problem can be determined. The problem may be data-dependent, in which case it will be necessary to examine the data that was being processed at the time the error occurred.

If the arithmetic expression in error was within the SELECT list of the outer SELECT statement, then it is advisable to include an indicator variable for all expressions in the SELECT list. This allows processing to continue so that non-error column and expression values can be returned.

See the explanation of SQLCODE -405 for allowed ranges of numeric data types.

Problem Determination: A fixed point overflow can occur during any arithmetic operation on either INTEGER or SMALLINT fields.

A divide exception can occur on a decimal division operation when the quotient exceeds the specified data field size. A zero divide occurs on a division by zero.

An exponent overflow can occur when the result characteristic of any floating-point operation exceeds 127 and the result fraction is not zero, for example, the magnitude of the result exceeds approximately 7.2E+75.

A decimal overflow exception can occur under either of the following circumstances:
- One or more non-zero digits are lost because the destination field in any decimal operation is too short to contain the result.
- A Java stored procedure sets a decimal value in an output parameter that has a precision or scale too small for the value. operation-type is JAVA CONVERSION. data-type is DECIMAL. position-number indicates which parameter of the CALL statement is in error.

Any of the exceptions/overflows can occur during the processing of a Built-In Function. If the operation-type is FUNCTION, then the error occurred while processing either an input, intermediate, or final value. The exception may occur because the value of a parameter is out of range.

Destination: 22012 if ZERO DIVIDE.
22003 if other than ZERO DIVIDE.

-803 AN INSERTED OR UPDATED VALUE IS INVALID BECAUSE THE INDEX IN INDEX SPACE indexspace-name CONSTRAINTS COLUMNS OF THE TABLE SO NO TWO ROWS CAN CONTAIN DUPLICATE VALUES IN THOSE COLUMNS. RID OF EXISTING ROW IS X'rid'.

Explanation: The table that is the object of the INSERT or UPDATE operation is constrained (by UNIQUE INDEX in the INDEX SPACE ‘indexspace-name’ ) to have unique values in certain columns. Completion of the requested INSERT or UPDATE would result in duplicate values occurring in row ‘rid’.

If a view is the object of the INSERT or UPDATE statement, the table that defines the view is constrained. The update might also be caused by a DELETE operation of a parent row that cascades to a dependent row with a delete rule of SET NULL.

System Action: The INSERT, UPDATE, or DELETE statement cannot be executed. The object table is unchanged.

Programmer Response: Examine the definitions for UNIQUE INDEX in the INDEX SPACE ‘indexspace-name’ to determine the uniqueness constraint imposed. Please refer to SYSIBM.SYSINDEXES for the ‘indexspace-name’ and the associated ‘index-name’.

For an UPDATE statement, verify that the specified operation is consistent with the uniqueness constraint. If this does not indicate the error, examine the object table to determine the cause of the problem.

For an INSERT statement, examine the object table to determine which values violate the uniqueness constraint. If the INSERT statement contains a subquery, match the contents of the table addressed by the subquery and the contents of the object table to determine the cause of the problem.

For a DELETE statement, examine the index key columns in the table that defines the index. These columns contain a foreign key, which when set NULL on a cascade delete from the object table, causes the duplicate values.

Destination: 23505
-804  AN ERROR WAS FOUND IN THE APPLICATION PROGRAM INPUT PARAMETERS FOR THE SQL STATEMENT, REASON reason

Explanation: The call parameter list or the SQLDA is invalid.

- The call parameter list, which is created by the precompiler, might be invalid if the application programmer has modified the output of the precompiler, used a variable name beginning with 'SQL' in the application program, or overwritten the call parameter list in some other way.
- The SQLDA, which is created by the application program, has an invalid data type or data length.
- The value of SQLDABC is not consistent with the value of SQLD.

The following is the list of reason codes:

01  Open issued for non-cursor.
02  Close issued for non-cursor.
03  Prepare of EXECUTE IMMEDIATE.
04  Statement is not recognized.
05  No statement string present.
06  Bad SQLDA format in parameter list.
07  SQLDA length is invalid.
08  Unrecognized input data type.
09  Invalid length for input variable.
10  Invalid data length for output variable.
11  The value of SQLDABC is not consistent with the value of SQLD.
12  Invalid input data pointer.
13  Invalid output data pointer.
14  SQLN has too many items for SQLDABC.
15  Input RDI pointer is invalid.
16  Unrecognized output data type.
17  The value of the 7th byte of SQLDAID is not consistent with the data types contained in the SQLDA. The SQLDA contains a LOB type host variable, but the 7th byte of SQLDAID is not set to '2' or greater to indicate that the extended SQLVARs have been allocated.

System Action: The statement cannot be executed.

System Programmer Response: Examine the application program for any of the errors noted under the explanation above. In general, the application programmer should not attempt to modify the output of the precompiler.

Destination: 07002

-805  DBRM OR PACKAGE NAME location-name.collection-id.dbrm-name.consistency-token NOT FOUND IN PLAN plan-name. REASON reason

Explanation: An application program attempted to use a DBRM or package 'location-name.collection-id.dbrm-name.consistency-token' that was not found.

Collection id is blank ('location-name.dbrm-name.consistency-token') if the CURRENT PACKAGESET special register was blank for the local program execution.

The REASON token is blank if the length of 'location-name' is 16, the length of 'collection-id' is 18, and the length of 'dbrm-name' is 8 due to the length of SQLERRMT.

The DBRM or package name was not found for one or more of the following reasons:

- 01
  - The DBRM name was not found in the member list of the plan and there is no package list for the plan. Refer to the first SQL statement under problem determination for assistance in determining the problem.
  - The package name was not found because there is no package list for the plan. Refer to the second SQL statement under Problem Determination for assistance in determining the problem.
- 02
  - The DBRM name 'dbrm-name' did not match an entry in the member list or the package list. Any of the following conditions could be the problem:
    - Bind conditions:
      - The 'collection-id' in the package list was not correct when the application plan 'plan-name' was bound. Refer to the second SQL statement under Problem Determination for assistance in determining the problem.
      - The 'location-name' in the package list was not correct when the application 'plan-name' was bound. Refer to the second SQL statement under Problem Determination for assistance in determining the problem.
      - The 'location-name' in the CURRENTSERVER option for the bind subcommand was not correct when the application plan 'plan-name' was bound. Refer to the third SQL statement under Problem Determination for assistance in determining the problem.
    - Application conditions:
      - The CURRENT PACKAGESET special register was not set correctly by the application.
      - The application was not connected to the proper location.
- 03
  - The DBRM name 'dbrm-name' matched one or more entries in the package list and the search of those entries did not find the package. The conditions listed under reason 02 or the following conditions might be the problem.
    - The DBRM of the version of the application program being executed was not bound (A package with the same consistency token as that of the application program was not found.) Refer to the fourth and fifth SQL statements under the Problem Determination section.
  - The incorrect version of the application program is being executed.
- 04
  - The package, 'collection-id.dbrm-name.consistency-token', does not exist at the remote site, 'location-name'. Refer to the fifth SQL statement under the Problem Determination section.
System Action: The statement cannot be executed.

System Programmer or Programmer Response: Based on the above reasons, the programmer can perform one or more of the following operations for each reason to correct the error.

- **01**
  - Add the DBRM name 'dbrm-name' to the MEMBER list of the BIND subcommand and bind the application plan 'plan-name', or
  - Add the PKLIST option with the appropriate package list entry to the REBIND subcommand and rebind the application plan 'plan-name'.

- **02**
  - Correct the dbrm-name of the entry in the PKLIST option and use the REBIND subcommand to rebind the application plan 'plan-name', or
  - Correct the location-name of the entry in the PKLIST option and use the REBIND subcommand to rebind the application plan 'plan-name', or
  - Correct the location-name in the CURRENTSERVER option and use the REBIND subcommand to rebind the application plan 'plan-name', or
  - Set the CURRENT PACKAGESET special register correctly, or
  - Connect to the correct location name.

- **03**
  All the operations under reason 02 above might fix the problem, plus the following operations.
  - Correct the collection-id of the entry in the PKLIST option and use the REBIND subcommand to rebind the application plan 'plan-name', or
  - Bind the DBRM of the version of the application program to be executed into the collection 'collection-id', or
  - Execute the correct version of the application program. The consistency token of the application program is the same as the package that was bound.

- **04**
  All the operations under reason 02 and 03 might fix the problem.

Problem Determination: The following queries aid in determining the problem. Run these queries at the local location.

1. This query displays the DBRMs in the member list for the plan. If no rows are returned, then the plan was bound without a member list.
   ```sql
   SELECT PLCREATOR, PLNAME, NAME, VERSION FROM SYSPDBRM WHERE PLNAME = 'plan-name';
   ```

2. This query displays the entries in the package list for the plan. If no rows are returned, then the plan was bound without a package list.
   ```sql
   SELECT LOCATION, COLLID, NAME FROM SYSPCPACKLIST WHERE PLNAME = 'plan-name';
   ```

3. This query displays the CURRENTSERVER value specified on the BIND subcommand for the plan.
   ```sql
   SELECT NAME, CURRENTSERVER FROM SYSIBM.SYSPLAN WHERE NAME = 'plan-name';
   ```

4. This query displays if there is a matching package in SYSPACKAGE. If the package is remote, put the location name in the FROM clause. If no rows are returned, the correct version of the package was not bound.
   ```sql
   SELECT COLLID, NAME, HEX(CONTOKEN), VERSION FROM <location-name.>SYSIBM.SYSPACKAGE WHERE NAME = 'dbrm-name' AND HEX(CONTOKEN) = 'consistency-token';
   ```

5. This query displays if there is a matching package in SYSPACKAGE. If the package is remote, put the location name in the FROM clause. Use this query when collection-id is not blank. If no rows are returned, the correct version of the package was not bound.
   ```sql
   SELECT COLLID, NAME, HEX(CONTOKEN), VERSION FROM <location-name.>SYSIBM.SYSPACKAGE WHERE NAME = 'dbrm-name' AND HEX(CONTOKEN) = 'consistency-token' AND COLLID = 'collection-id';
   ```

Destination: 51002

-807 ACCESS DENIED: PACKAGE package-name IS NOT ENABLED FOR ACCESS FROM connection-type connection-name

Explanation: Access is denied for one of the following reasons:

- It is disabled, either from the 'connection-type' or from the 'connection-type' with the specific 'connection-name'.
- The attach library that you are using is from a previous release of DB2 that does not support the ENABLE and DISABLE options of the bind operation.

The variables are:

- **package-name** The package name (collection.package-id).
- **connection-type** One of the following: BATCH, DB2CALL, REMOTE, IMSBMP, IMSMPP, CICS, DLIBATCH, or UNKNOWN.
- **connection-name** Name of the connection that is restricted. If all connection names from a specific connection-type are restricted, this value is not specified.

System Action: The statement is not executed and the package is not allocated.

System Programmer Response: One of the following:

- Rebind the package to enable it to execute with the required connection type and name.
- Check the SYSPLSYSTEM or SYSPKSYSTEM catalog table to find a connection from which the package can be executed.
- Correct the attach library.

Destination: 23509
-808 THE CONNECT STATEMENT IS NOT CONSISTENT WITH THE FIRST CONNECT STATEMENT

Explanation: The CONNECT semantics that apply to an application process are determined by the first CONNECT statement executed (successfully or unsuccessfully) by the application process. One of the following rules was violated:

- A type 2 CONNECT statement cannot be executed after a type 1 CONNECT statement was executed.
- A type 1 CONNECT statement cannot be executed after a type 2 CONNECT statement was executed.

System Action: The statement cannot be executed.

Programmer Response: The probable cause of this error is that different programs in the application process were precompiled with different CONNECT options.

Ensure that the application process uses either type 1 or type 2 CONNECT statements and then resubmit the job. The type of CONNECT to be used is a precompiler option. The default is type 2 CONNECT.

Destination: 08001

-811 THE RESULT OF AN EMBEDDED SELECT STATEMENT OR A SUBSELECT IN THE SET CLAUSE OF AN UPDATE STATEMENT IS A TABLE OF MORE THAN ONE ROW, OR THE RESULT OF A SUBQUERY OF A BASIC PREDICATE IS MORE THAN ONE VALUE

Explanation: Execution of an embedded SELECT statement or a subselect in the SET clause of an UPDATE statement has resulted in a result table that contains more than one row. Alternatively, a subquery contained in a basic predicate has produced more than one value.

System Action: The statement cannot be executed.

Programmer Response: Examine the syntax of the statement to ensure that it contains the proper condition specifications. If the statement syntax is correct, there might be a problem with the data that is causing more than one row or value to be returned when you do not expect it.

Destination: 21000

-812 THE SQL STATEMENT CANNOT BE PROCESSED BECAUSE A BLANK COLLECTION-ID WAS FOUND IN THE CURRENT PACKAGESET SPECIAL REGISTER WHILE Trying TO FORM A QUALIFIED PACKAGE NAME FOR PROGRAM program-name.consistency-token USING PLAN plan-name

Explanation: A last or only entry in the package list for the plan contained asterisk (*) the 'collection-id' which requires the 'CURRENT PACKAGESET' special register to be set to a nonblank 'collection-id' in order to form a qualified package name.

System Action: The statement cannot be executed.

Programmer Response: Set the 'CURRENT PACKAGESET' special register to the desired 'collection-id' or have your system administrator check the plan's package list for correctness.

Destination: 22508

-815 A GROUP BY OR HAVING CLAUSE IS IMPLICITLY OR EXPLICITLY SPECIFIED IN A SUBSELECT OF A BASIC PREDICATE OR THE SET CLAUSE OF AN UPDATE STATEMENT

Explanation: A subselect of a basic predicate or a SET clause of an UPDATE statement either:

- directly contains a GROUP BY or HAVING clause
- specifies as its object a view having a definition that includes a GROUP BY or HAVING clause

Neither construct is permitted.

System Action: The statement cannot be executed. No data was retrieved.

Programmer Response: The implied function is not supported by DB2.

No coding workaround exists for the subselect. A GROUP BY or HAVING clause cannot be used within the subselect of a basic predicate because the subselect is allowed to return only a single value. For more information on basic predicates, refer to DB2 SQL Reference.

Destination: 42920

-817 THE SQL STATEMENT CANNOT BE EXECUTED BECAUSE THE STATEMENT WILL RESULT IN A PROHIBITED UPDATE OPERATION.

Explanation: The application attempted to execute an SQL statement that would result in updates to user data or to the subsystem catalog. This is prohibited for one of the following reasons:

- The application is running as an IMS inquiry-only transaction.
- The application is an IMS or CICS application that is attempting to update data at a remote DBMS that does not support two-phase commit.
- The application is attempting to update data at multiple locations and one of the locations does not support two-phase commit.
- A trigger defined with activation time BEFORE was activated and its triggered action caused updates to the database.

These SQL statements include INSERT, UPDATE, DELETE, CREATE, ALTER, DROP, GRANT, and REVOKE.

System Action: The statement cannot be executed.

Programmer Response: If the application is running as an IMS inquiry-only transaction, see your IMS system programmer about changing the inquiry-only status of the transaction under which your application is running.

If the IMS or CICS application is attempting a remote update, either the application must be changed to run as a local application on the server DBMS, or the server DBMS must be upgraded to support two-phase commit.

If the application is attempting to update data at multiple locations, either the application must be changed, or all DBMSs involved must be upgraded to support two-phase commit.

If the error is due to an invalid statement during a trigger activation, contact your system administrator to correct the trigger definition.
-818  THE PRECOMPILED-GENERATED TIMESTAMP x IN THE LOAD MODULE IS DIFFERENT FROM THE BIND TIMESTAMP y BUILT FROM THE DBRM z

Explanation: The SQL precompiler places timestamp 'y' in the DBRM, and time stamp 'x' in the parameter list in the application program for each SQL statement. At BIND time, DB2 stores the DBRM timestamp for run-time use. At run-time, timestamp 'x', for the SQL statement being processed, is compared with timestamp 'y' derived from the DBRM 'z' at BIND time. If the two timestamps do not match, the DBRM and the application program were not the result of the same precompile.

This problem can occur if you:
- Precompile, compile, and link, without doing a BIND of the application.
- Precompile and BIND, without doing the compile and link for the application program, or
- BIND the application using a DBRM that resulted from a different precompile of the application program than that which produced the object module that is linked into the application module.

The timestamps 'x' and 'y' are DB2 internal timestamps. They do not have an external interpretation.

System Action: The statement cannot be executed.

Programmer Response: BIND the application again, using the DBRM for the application program that matches the object module.

Destination: 51003

-819  THE VIEW CANNOT BE PROCESSED BECAUSE THE LENGTH OF ITS PARSE TREE IN THE CATALOG IS ZERO

Explanation: SYSIBM.SYSTREE.VTREE is a varying-length string column that contains the parse trees of views. In processing a view, the length control field of its parse tree was found to be zero.

System Action: The statement cannot be executed.

Programmer Response: This is a system error. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Destination: 58004

-820  THE SQL STATEMENT CANNOT BE PROCESSED BECAUSE catalog-table CONTAINS A VALUE THAT IS NOT VALID IN THIS RELEASE

Explanation: A column of the indicated catalog table contains a value that prevents further processing of an SQL statement. The meaning of the value is unknown to the release of DB2. If a fall back has occurred, the value is probably the result of the use of new function prior to the fall back.

System Action: The statement cannot be executed.

Programmer Response: Verify that the statement refers to the intended tables or views and that the problem is the result of a fall back. If this is the case, the statement cannot be corrected because it depends on a function that is not supported in the current release. If the problem is not the result of a fall back, -820 is a system error. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Destination: 58004

-822  THE SQLDA CONTAINS AN INVALID DATA ADDRESS OR INDICATOR VARIABLE ADDRESS

Explanation: The application program has placed an invalid address in the SQLDA.

System Action: The statement cannot be executed.

Programmer Response: Correct the application program such that valid addresses are placed in SQLDA.

Destination: 51004

-840  TOO MANY ITEMS RETURNED IN A SELECT OR INSERT LIST

Explanation: The number of items returned in the select list or presented in an insert list exceeds the allowable maximum of 750.

System Action: The statement cannot be executed.

Programmer Response: Determine whether all the information is actually needed. (Note that the number of items returned by the select list * in the SQL statement SELECT * FROM A, B, C is the sum of the number of columns in all three tables.) If not, rewrite the SQL statement so that only the necessary items of information are returned. If so, break the SQL statement up into two or more statements, as required.

Destination: 54004

-842  A CONNECTION TO location-name ALREADY EXISTS

Explanation: One of the following situations occurred:
- A CONNECT statement identifies a location with which the application process has a private connection, using system-directed access.
- SQLRULES(STD) is in effect and a CONNECT statement identifies an existing SQL connection.
- A private connection, using system-directed access, cannot be established because of an existing SQL connection to that location.

System Action: The statement cannot be executed.

Programmer Response: The correction depends on the error, as follows:
- If the location name is not the intended name, correct it.
- If SQLRULES(STD) is in effect and the CONNECT statement identifies an existing SQL connection, replace the CONNECT with SET CONNECTION or change the option to SQLRULES(DB2).
- If the CONNECT statement identifies an existing private connection, destroy that connection (by using the RELEASE statement in a previous unit of work) before executing the CONNECT statement. If the SQL statements following the CONNECT can be executed using system-directed access, an alternative solution is to change the application to use that method.
• If system-directed access cannot be used, destroy the conflicting SQL connection (by using the RELEASE statement in a previous unit of work) before executing the SQL statement that requires system-directed access. An alternative solution is to change the application so that only application-directed access is used.

Correct the error in the application, rebind the plan or package, and resubmit the job.

**Destination:** 08002

---

**-843 THE SET CONNECTION OR RELEASE STATEMENT MUST SPECIFY AN EXISTING CONNECTION**

**Explanation:** One of the following rules was violated:

- A SET CONNECTION statement must identify an existing SQL connection of the application process.
- A RELEASE statement must identify an existing connection of the application process.

**System Action:** The statement cannot be executed.

**Programmer Response:** The correction depends on the error, as follows:

- If the location name is not the intended name, correct it.
- If the location name does not identify an existing SQL connection, replace the SET CONNECTION with a CONNECT statement.
- If RELEASE CURRENT was executed in the unconnected state or the specified location name does not identify an existing SQL or DB2 private connection, delete the RELEASE statement.

Correct the error in the application, rebind the plan and resubmit the job.

**Destination:** 08003

---

**-846 INVALID SPECIFICATION OF AN IDENTITY COLUMN**

**Explanation:** For an ALTER or CREATE TABLE statement, the specification of an identity column may be invalid for one of the following reasons:

- The data type of the associated column was not one of the allowed data types for an identity column. The allowed data types are the following:
  - INTEGER
  - SMALLINT
  - DECIMAL with a scale of zero
- An invalid value was specified for INCREMENT BY. This value can be any positive or negative value that could be assigned to this column, but it must be within the range defined for the INTEGER type and can not be 0.
- The CREATE TABLE statement can not specify an EDITPROC for a table that has an identity column.
- The ALTER TABLE statement can not define an identity column on a global temporary table.
- The CREATE TABLE LIKE statement can not create a table with an edit procedure like another table that has an identity column.

**System Action:** The statement cannot be executed.

**Programmer Response:** Correct the syntax and resubmit the statement.

**Destination:** 42815

---

**-867 INVALID SPECIFICATION OF A ROWID COLUMN**

**Explanation:** For an ALTER or CREATE TABLE statement, the specification of a ROWID column might be invalid for one of the following reasons:

- A ROWID column can not be added to a temporary table.
- The referential-constraint clause can not specify a ROWID column as a column of a foreign key.
- A ROWID column can not be a column of a primary key.
- A ROWID column can not be a column in a table with an EDITPROC.

**System Action:** The statement cannot be executed.

**Programmer Response:** Correct the syntax and resubmit the statement.

**Destination:** 428C7

---

**-870 THE NUMBER OF HOST VARIABLES IN THE STATEMENT IS NOT EQUAL TO THE NUMBER OF DESCRIPTORS**

**Explanation:** The number of host variables in the SQL statement does not match the number of host variable descriptors.

**System Action:** The statement cannot be executed.

**Programmer Response:** Correct the application program. The most likely cause of this problem is a missing colon before a host variable.

**Problem Determination:** If the SQL statement is bound locally, descriptors are built by the DB2 precompiler. For a remote SQL statement, descriptors are built by DDF and are passed in the array SQLSTTVRB.

**Destination:** 58026

---

**-872 A VALID CCSID HAS NOT YET BEEN SPECIFIED FOR THIS SUBSYSTEM**

**Explanation:** A valid CCSID was not specified on either the ASCII CODED CHAR SET or EBCDIC CODED CHAR SET subsystem parameter on installation panel DSNTIPF.

**System Action:** The statement cannot be executed.

**Programmer Response:** Contact your system administrator to have the necessary CCSID defined for your system.

**Destination:** 51032

---

**-873 DATA ENCODED WITH DIFFERENT CCSIDS CANNOT BE REFERENCED IN THE SAME SQL STATEMENT**

**Explanation:** You cannot refer to a column defined in an ASCII table in the same SQL statement as a column defined in an EBCDIC table.

This situation can also occur when a table is created; a DECP CCSID value is changed; another table is created, and then the two tables are referenced in a single SQL statement.

**System Action:** The statement cannot be executed.

**Programmer Response:** Correct the SQL statement.
THE ENCODING SCHEME SPECIFIED FOR THE object-type MUST BE THE SAME AS THE CONTAINING TABLE SPACE OR OTHER PARAMETERS

Explanation: The encoding scheme must be specified depending on the object-type as follows:

- For TABLE, the table must have the same encoding scheme, ASCII or EBCDIC, as the containing table space. The encoding scheme of a table must be the same as the table space which contains the table. This does not apply to GLOBAL TEMPORARY TABLES as they have no table space associated with them.
- For DISTINCT TYPE, the distinct type must have the same encoding scheme, ASCII or EBCDIC, as the containing table space.
- For FUNCTION, all of the parameters of the function must be defined with the same encoding scheme, ASCII or EBCDIC.

System Action: The statement cannot be executed.
Programmer Response: Correct the SQL statement.

CCSID ASCII IS NOT ALLOWED FOR THIS DATABASE OR TABLE SPACE

Explanation: The database or table space specified is required to be in EBCDIC.

System Action: The statement cannot be executed.
Programmer Response: Remove the CCSID ASCII clause from the statement.

THE PLAN_TABLE USED FOR EXPLAIN CANNOT BE ASCII

Explanation: PLAN_TABLEs must be encoded in EBCDIC for use with EXPLAIN.

System Action: The statement cannot be executed.
Programmer Response: Drop the existing PLAN_TABLE, and recreate it with the EBCDIC encoding scheme.

CREATE or ALTER STATEMENT FOR object-name CANNOT DEFINE A COLUMN, DISTINCT TYPE, FUNCTION OR STORED PROCEDURE PARAMETER AS MIXED OR GRAPHIC WITH ENCODING SCHEME encoding-scheme

Explanation: A CREATE or ALTER TABLE statement for object-name attempted to define a column, distinct type, or parameter of a user-defined function or stored procedure as mixed data or graphic when the system does not have an appropriate CCSID defined for the encoding-scheme encoding.
- A CREATE or ALTER TABLE statement for an ASCII table cannot define a column as CHAR FOR MIXED DATA or GRAPHIC, VARGRAPHIC, LONG VARGRAPHIC, or DBCLOB, when the MIXED DATA install option is set to NO.
- A CREATE DISTINCT TYPE statement cannot define a distinct type with a source type of CHAR FOR MIXED DATA, or GRAPHIC, VARGRAPHIC, or DBCLOB, when the MIXED DATA install option is set to NO.
- A CREATE FUNCTION or CREATE PROCEDURE statement cannot define a parameter or specify a RETURNS data type as CHAR FOR MIXED DATA, or GRAPHIC, VARGRAPHIC, or DBCLOB, when the MIXED DATA install option is set to NO.

System Action: The statement cannot be executed.
Programmer Response: Contact your system administrator to properly setup the installation options, or change the data types of the elements in columns in your CREATE or ALTER statement.

Messages and Codes
-880  SAVEPOINT DOES NOT EXIST
Explanation: The RELEASE TO SAVEPOINT or ROLLBACK TO SAVEPOINT statement does not identify a savepoint that exists.
System Action: The statement is not executed.
Programmer Response: Correct the statement to use a valid savepoint name.
Destination: 3B001

-881  DUPLICATE SAVEPOINT NAME
Explanation: The SAVEPOINT statement uses the same savepoint name as another savepoint, and it cannot be created because at least one of the savepoints was defined with the UNIQUE clause to indicate that the name cannot be reused within the transaction.
System Action: The statement is not executed and a new savepoint is not set. The old savepoint still exists.
Programmer Response: Correct the statement. Either use a different savepoint name, or omit the UNIQUE clause if the other savepoint was created without the UNIQUE clause and your intention is to reuse that savepoint name.
Destination: 3B501

-882  NO SAVEPOINT EXISTS
Explanation: A ROLLBACK TO SAVEPOINT statement was specified without a savepoint name to rollback to the last active savepoint, but no savepoint exists.
System Action: The statement is not executed.
Programmer Response: Correct the application logic to either set a savepoint or to not attempt to rollback to a savepoint.
Destination: 3B502

-900  THE SQL STATEMENT CANNOT BE EXECUTED BECAUSE THE APPLICATION PROCESS IS NOT CONNECTED TO AN APPLICATION SERVER
Explanation: A previous failure has placed the application process in the unconnected state. The only SQL statements that can be successfully executed from the unconnected state are CONNECT, COMMIT, ROLLBACK, and local SET statements.
System Action: The statement cannot be executed.
Programmer Response: It is possible that no response is required because checking for -900 is one way of detecting the unconnected state. If this is not the case, the logic of the application program must be changed. For additional information, see the description of the CONNECT statement in Chapter 6 of DB2 SQL Reference.
Destination: 08003

-901  UNSUCCESSFUL EXECUTION CAUSED BY A SYSTEM ERROR THAT DOES NOT PRECLUDE THE SUCCESSFUL EXECUTION OF SUBSEQUENT SQL STATEMENTS
Explanation: A system error occurred that prevented successful execution of the current SQL statement. However, the error does not prevent successful execution of further SQL statements.
The error might occur if the length of the SQL statement is less than 0, or is greater than the DB2 maximum length for a statement.
This SQLCODE might also occur when distributed commit processing encounters an error. In this case, all servers in the unit of work that support distributed two-phase commit backed out the unit of work. If a server that does not support distributed two-phase commit has updates in the unit of work, that server must be queried to determine if its updates were committed or backed out.
Finally, this error might occur during commit if post-processing cannot be completed because of an update that changes the partition of a row. Resource unavailable problems can prevent the post-processing from completing. The existence of held cursors can prevent the post-processing from completing.
Commit is failed. The transaction is aborted.
System Action: The statement cannot be executed. A X'04E' abend might be requested for the application. The application program can have a recovery routine to recover from such an abend and can retry SQL statements.
Programmer Response: If an abend occurred, notify the system programmer for analysis of the abend that caused this return code.
Even if an abend occurred, an application program receiving this return code can retry and is not prohibited from executing further SQL statements.
Destination: 58004

-902  POINTER TO THE ESSENTIAL CONTROL BLOCK (CT/RDA) HAS VALUE 0, REBIND REQUIRED
Explanation: Pointer to the essential control block, either the CT or the RDA is zeroes. This precludes the successful execution of the current SQL statement, as well as any subsequent SQL statements.
System Action: The statement cannot be executed. The application program is not permitted to issue additional SQL statements. For example, a recovery routine associated with the application program may not issue additional SQL statements.
Programmer Response: Rebind the failing application program and try again. If the problem persists, examine your DBRM and make sure it matches your program.
Destination: 58005
-904   UNSUCCESSFUL EXECUTION CAUSED BY AN UNAVAILABLE RESOURCE. REASON rea-
son-code, TYPE OF RESOURCE resource-type, AND RESOURCE NAME resource-name

Explanation: The SQL statement could not be executed because resource "resource-name" of type "resource-type" was not available at the time for the reason indicated by "reason-code". Refer to Table 3 in Appendix B, "Problem determination" on page 1051 for an explanation of resource type codes. Refer to Section 4, DB2 Codes on page 577 for an explanation of the given reason code.

System Action: The SQL statement cannot be executed. If the SQL statement being executed was a cursor FETCH, DB2 closes the cursor. Subsequent attempts to use that cursor without first doing an OPEN for it receive an SQLCODE -501.

Programmer Response: Verify the identity of the resource that was not available. To determine why the resource was unavailable, refer to the specified "reason-code".

Destination: 57014

-905   UNSUCCESSFUL EXECUTION DUE TO RESOURCE LIMIT BEING EXCEEDED. RE-
SOURCE NAME = resource-name LIMIT = limit-amount1 CPU SECONDS (limit-amount2
SERVICE UNITS) DERIVED FROM limit-source

Explanation: The execution of the SQL statement was terminated because a resource limit was exceeded.

resource-name The name of the resource whose limit was exceeded. It is also the name of the column in the DB2 table from which the limit was derived. The resource-name can be ASUTIME, which is the number of CPU seconds permitted for each SQL statement.

limit-amount1 The maximum number of CPU seconds permitted

limit-amount2 The maximum number in service units permitted

limit-source The source used to derive the limit-amount: the name of a resource limit specification table, a system parameter, or the SYSlBM.SYSPRINTUES catalog table. If the source is a system parameter, the resource limit specification table did not contain an applicable entry or an error occurred while accessing the table.

System Action: If the limit-source was a resource limit specification table or a system parameter, the execution of this SQL statement is terminated. A record containing more detailed information about this failure is generated. If an SQL cursor is associated with the failed instruction, its position is unchanged and a CLOSE or PREPARE command can be issued. If any other operation is attempted with the cursor, it cannot be executed and SQLCODE -905 is returned. If there is no cursor, this statement was rolled back.

Programmer Response: Determine why this SQL statement or stored procedure took so long and take appropriate action. Consider simplifying the SQL statement, restructuring tables and indexes, or contacting the installation group responsible for maintaining the resource limit specification tables.

If the limit-source was a resource limit specification table or a system parameter, the application program that receives this return code can execute additional SQL statements.

Destination: 57014

-906   THE SQL STATEMENT CANNOT BE EXECUTED BECAUSE THIS FUNCTION IS DISA-
BLED DUE TO A PRIOR ERROR

Explanation: Execution of the SQL statement failed because the requested function had been disabled by a prior error. This situation can arise if the application program has intercepted an abend (for instance, by an ON ERROR condition in a PL/I program) and continued to execute SQL statements. This situation may also arise if a DB2 CICS transaction encountered a create thread error yet continued to issue SQL requests without issuing a SYNCPOINT ROLLBACK first.

System Action: The statement cannot be executed.

Programmer Response: In general, an application program should terminate upon receipt of this return code. All subsequent attempts by the application to execute other SQL statements will also fail with the same return code. In the case of a DB2 CICS transaction, if the SQLERRP field in the SQLCA contains the module name DSNCXET1, the transaction may issue a SYNCPOINT ROLLBACK and continue processing. If the transactions chooses to ROLLBACK and continue processing, it must be capable of correcting the situation that caused the create thread error to occur originally.

Destination: 51005

-908   bind-type ERROR USING auth-id AUTHORITY. BIND, REBIND OR AUTO-REBIND OPERATION
IS NOT ALLOWED

Explanation: For BIND and REBIND, the indicated authorization ID is not allowed to perform the indicated bind-type against a plan or package. An entry in the resource limit specification table (RLST) prohibits binding and rebinding by this authorization ID, or all authorization IDs. For AUTO-REBIND, the system parameter controlling AUTO-REBIND operations is set to disallow AUTO-REBIND.

bind-type Type of bind operation (BIND, REBIND or AUTO-REBIND).

auth-id Authorization ID of the invoker of the BIND subcom-
mand or primary authorization ID of the invoker of the plan for AUTO-REBIND operations.

System Action: The plan or package is not bound.

System Programmer Response: If the indicated authorization id should be allowed to bind, change the entry in the active RLST table. If AUTO-REBIND operations are disabled, rebuild the package before reexecuting the package.

Destination: 23510

-909   THE OBJECT HAS BEEN DELETED

Explanation: The application program has either:

1. Dropped a table and then attempted to access it.
2. Dropped an index and then tried to access its object table using that index.

System Action: The statement cannot be executed.

System Programmer Response: The logic of the application
program must be corrected such that it does not attempt to access or use an object after it has been dropped.

Dropping indexes within an application program is especially hazardous, because there is no way of determining whether or not the plan that has been generated for the application (by BIND or REBIND) actually uses a particular index for access to its object table. If the indicated authorization id should be allowed to bind, change the entry in the active RLST table. If AUTO-REBIND operations are disabled, rebind the package before reexecuting the package.

Destination: 57007

---

-910 THE SQL STATEMENT CANNOT ACCESS AN OBJECT ON WHICH A DROP OR ALTER IS PENDING

Explanation: The application program has issued a DROP or ALTER against an object, and then attempted to access that object before the DROP or ALTER is completed.

System Action: The statement cannot be executed.

Programmer Response: In the case of ALTER, the logic of the application program must be modified so that a COMMIT (or the IMS or CICS equivalent) is executed between the ALTER and the failing SQL statement.

For DROP, the logic of the application program should be modified such that there is no attempt to access an object after the DROP has been executed.

Note: DROP includes the case when rollback to a savepoint includes rolling back to a CREATE.

Destination: 57007

---

-911 THE CURRENT UNIT OF WORK HAS BEEN ROLLED BACK DUE TO DEADLOCK OR TIMEOUT. REASON reason-code, TYPE OF RESOURCE resource-type, AND RESOURCE NAME resource-name

Explanation: The current unit of work was the victim in a deadlock, or experienced a timeout, and had to be rolled back.

The reason code indicated whether a deadlock or timeout occurred. Refer to message DSNT500I under "DSNT... Messages" on page 315 for an explanation of "resource-type" and "resource-name". Refer to Table 3 in Appendix B, "Problem determination" on page 1051 for an explanation of resource type codes.

Note: The changes associated with the unit of work must be entered again.

| SQLERRD(3) also contains the reason-code which indicates whether a deadlock or timeout occurred. The most common reason codes are:
| - 00C90088 - deadlock
| - 00C9008E - timeout

System Action: The statement cannot be executed. The application is rolled back to the previous COMMIT.

Programmer Response: A long-running application, or an application that is likely to encounter a deadlock, should (if possible) issue frequent COMMIT commands. This can lessen the possibility of a deadlock occurring. See message DSNT376I for other possible ways to avoid future deadlocks or timeouts. On receipt of the SQLCODE -911, the application should, in general, terminate.

For more information about how IMS, CICS, and TSO handle deadlocks, see Section 5 of DB2 Application Programming and SQL Guide.

Destination: 40001

---

-913 UNSUCCESSFUL EXECUTION CAUSED BY DEADLOCK OR TIMEOUT. REASON CODE reason-code, TYPE OF RESOURCE resource-type, AND RESOURCE NAME resource-name

Explanation: The application was the victim in a deadlock or experienced a timeout. The reason code indicates whether a deadlock or timeout occurred.

Refer to message DSNT500I under "DSNT... Messages" on page 315 for an explanation of "resource-type" and "resource-name". Refer to Table 3 in Appendix B, "Problem determination" on page 1051 for an explanation of resource type codes.

System Action: The SQL statement cannot be executed. If the SQL statement being executed was a cursor FETCH, DB2 closes the cursor.

| SQLERRD(3) also contains the reason-code which indicates whether a deadlock or timeout occurred. The most common reason codes are:
| - 00C90088 - deadlock
| - 00C9008E - timeout

Programmer Response: The application should either commit or roll back to the previous COMMIT. Then, generally, the application should terminate. See message DSNT376I for possible ways to avoid future deadlocks or timeouts.

For more information about how CICS and TSO handle deadlocks, see Section 5 of DB2 Application Programming and SQL Guide.

Destination: 57033

---

-917 BIND PACKAGE FAILED

Explanation: An error has occurred which prevents the package from being created. This SQLCODE can be issued during bind or commit processing.

System Action: The bind fails and the package is not created. If issued during commit processing, all changes to the database are rolled back. If issued during bind processing, only package creation fails. Other changes within the logical unit of work are committable.

Programmer Response: Correct the cause of the problem and try again.

Problem Determination: Inspect the SQLCODES issued for the SQL statements of the package.

Destination: 42969
-918  THE SQL STATEMENT CANNOT BE EXECUTED BECAUSE A CONNECTION HAS BEEN LOST

Explanation: Execution of the SQL statement failed because a communications link between the local DB2 and at least one remote server no longer exists. A previous failure caused this condition.

System Action: In the IMS and CICS environments, all SQL statements are rejected until the rollback occurs. In the other environments, all SQL statements other than a static ROLLBACK are rejected until a static ROLLBACK is executed.

Programmer Response: In general, an application program should issue a static ROLLBACK. Attempts by the application to issue SQL statements other than static ROLLBACK might fail. Once the static ROLLBACK is issued, the application can resume execution.

SQLERRRP contains the name of the module that detected the previous failure and placed the application in the must-abort state.

Destination:  51021

-919  A ROLLBACK OPERATION IS REQUIRED

Explanation: The unit of work was placed in a state where a rollback operation is required. This can happen for the following reasons:

- An SQL statement updated a distributed database server, but the database server can be used only for read-only operations. Either updates are currently restricted to servers that support distributed two-phase commit and this application server does not support distributed two-phase commit, or updates are restricted to a single server that does not support distributed two-phase commit and this application server is not that server.

The unit of work must be terminated by a rollback operation because the update made (but not committed) at the application server cannot be committed consistently with other current or future updates made to this distributed unit of work.

- An abend occurred during the execution of a stored procedure, or a restricted SQL statement was issued from a stored procedure.

- An abend occurred during the execution of a function, or a restricted SQL statement was issued from a function.

System Action: In the IMS and CICS environments, all SQL statements are rejected until the rollback occurs. In the other environments, all SQL statements other than a static ROLLBACK are rejected until a static ROLLBACK is executed.

Programmer Response: Correct the application, function, or stored procedure, rebind it, and resubmit the job.

SQLERRRP contains the name of the module that detected the previous failure and placed the application in the must-abort state.

Destination:  56045

-922  AUTHORIZATION FAILURE: error-type ERROR.

Explanation: Authorization failed because of the error indicated by 'error-type'
• The application is trying to execute the plan from a system (environment) that was restricted when the plan was bound or rebound. Check the SYSPSLSYSTEM table to determine from which systems (for example, IMS or CICS) the plan can be executed.

If the condition is "CICS attachment not up", then NAME indicates the DB2 subsystem that is not available. The reason code indicates the reason the attachment is not available.

# If the condition is "CICS entry disabled", then NAME indicates the entry that is disabled.

System Action: The statement cannot be executed. The connection to DB2 is not established.

Programmer Response: If the connection failed because either DB2 or a required database, table space, table, or index was unavailable, wait until it is available before invoking the application again.

If allocation failed for an application plan, REBIND the plan to determine the problem. Error messages are produced explaining why the plan could not be allocated.

For other types of allocation errors, installation action might be required to correct the problem.

For CICS attachment failures, resolve the primary cause as noted by the reason code. Then restart the attachment.

Problem Determination: The reason-code, resource-type, and resource-name might not be available. If they are not available, nothing appears. If they are available, refer to [Section 4, DB2 Codes] for an explanation of the reason-code, resource-type, and resource-name.

Refer to message DSNT5001 under [DSNT... Messages] for an explanation of resource type and resource name. Refer to Table 3 in [Appendix B, "Problem determination" on page 1051] for an explanation of resource type codes. Any attempts to issue SQL statements after receiving SQLCODE -924 will cause unpredictable results.

Destination: 57015

-924 DB2 CONNECTION INTERNAL ERROR, function-code, return-code, reason-code

Explanation: Connection to DB2 has failed because of an unexpected internal error, identified by the 'reason-code'.

System Action: The statement cannot be executed. The connection to DB2 is not established.

Programmer Response: Look up the aberr 'reason-code' in [Section 4, DB2 Codes] for further information. The requested 'function-code' and 'return-code' may provide additional information. Any attempts to issue SQL statements following the SQLCODE -924 will cause unpredictable results.

Destination: 58006

# -925 COMMIT NOT VALID IN IMS, CICS OR RRSAF ENVIRONMENT

Explanation: An application executing in either an IMS or CICS environment or an application executing in an RRSAF environment when DB2 is not the only resource manager has attempted to execute a COMMIT statement. The SQL COMMIT statement cannot be executed in these environments.

System Action: The statement cannot be executed. No commit is performed.

# Programmer Response: The IMS, CICS or RRSAF protocols should be used to commit work in these environments.

If a stored procedure is being called from IMS or CICS, ensure that the stored procedure is not defined to perform a commit on return.

Destination: 2D521

# -926 ROLLBACK NOT VALID IN IMS, CICS OR RRSAF ENVIRONMENT

Explanation: An application executing in either an IMS or CICS environment or an application executing in an RRSAF environment when DB2 is not the only resource manager has attempted to execute a ROLLBACK statement. The SQL ROLLBACK statement cannot be executed in these environments.

System Action: The statement cannot be executed. No rollback is performed.

# Programmer Response: The IMS, CICS or RRSAF protocols should be used to rollback work in these environments.

Destination: 2D521

-927 THE LANGUAGE INTERFACE (LI) WAS CALLED WHEN THE CONNECTING ENVIRONMENT WAS NOT ESTABLISHED. THE PROGRAM SHOULD BE INVOKED UNDER THE DSN COMMAND

Explanation: In the TSO environment, the user has attempted to execute an application program without first establishing the correct execution environment by issuing the DSN command. In the IMS, CICS, or call attachment facility (CAF) environment, the user has attempted to execute an application program that is not using the correct language interface module.

System Action: The statement cannot be executed.

Programmer Response: In the TSO environment, DB2 application programs should be invoked under the RUN subcommand of the DSN command processor. In the IMS, CICS or CAF environment check that the application was link-edited with or is dynamically allocating the correct language interface module. The language interface modules required in each environment are as follows:

- IMS: DFSLI000
- CICS: DSNCLI
- CAF: DSNALI
- TSO: DSNELI

The DYNAM option can result in the incorrect language interface module being loaded at runtime.

Destination: 51006

-929 FAILURE IN A DATA CAPTURE EXIT: token

Explanation: 'token' is an information string provided by DPROP's exit routine which captures data changes in tables defined with DATA CAPTURE CHANGES.

System Action: The information string is placed in in the SQLERRM area of the SQLCA.

System Programmer Response: For documentation of the actions associated with this SQLCODE, refer to the Data Propagator (DPROP) publications.

Destination: 58002
-939 ROLLBACK REQUIRED DUE TO UNREQUESTED ROLLBACK OF A REMOTE SERVER

Explanation: A dynamic commit was executed preceding the execution of this request. The remote server to which the application was CONNECTed during the dynamic COMMIT successfully committed. However, at least one other remote server (which was read-only) rolled back its portion of the distributed unit of work during the dynamic commit.

To ensure that an application that uses cursor-hold cursors does not incorrectly assume cursor position is being maintained at any remote server that rolled back, the application must perform a rollback operation.

Communications are still established with all remote servers.

System Action: In the IMS and CICS environments, all SQL statements are rejected until the rollback occurs. In the other environments, all SQL statements other than a static ROLLBACK are rejected until a static ROLLBACK is executed.

Programmer Response: Issue the appropriate (depending on the environment) request to cause a rollback. Re-establish any cursor positioning and continue the application with the first request that received the -939 SQLCODE.

SQLERRP contains the name of the module that detected the previous failure and placed the application in the must-abort state.

Destination: 51021

-947 THE SQL STATEMENT FAILED BECAUSE IT WILL CHANGE A TABLE DEFINED WITH DATA CAPTURE CHANGES, BUT THE DATA CANNOT BE PROPAGATED

Explanation: The DPROP SUPPORT option on the installation panel is set to 2 (support DPROP only). The SQL statement would have changed a table defined with DATA CAPTURE CHANGES. However, the data cannot be propagated because the SQL statement did not originate from an IMS subsystem, or monitor trace class 6 was not active at the beginning of the unit of work for that change.

System Action: The statement is not executed.

System Programmer Response: Take one of the following actions:

- Change the installation option to 1 (no propagation) or 3 (permit changes from any subsystem).
- Change the application program that receives this SQLCODE so that it can be run in an IMS subsystem, and activate monitor trace class 6.

If the installation option is changed to 3, SQL changes to tables defined with DATA CAPTURE CHANGES are permitted from any subsystem, but they are not propagated unless the environment is set up for propagation.

Destination: 56038

-948 DISTRIBUTED OPERATION IS INVALID

Explanation: The unit of work was initiated before DDF was started, and the application attempted to perform a distributed operation. The unit of work must be terminated by a rollback operation.

System Action: In the IMS and CICS environments, all SQL statements are rejected until a rollback occurs. In the other environments, all SQL statements other than a static ROLLBACK are rejected until a static ROLLBACK is executed.

Programmer Response: An application that performs local database updates before DDF is started cannot perform distributed operations within the same unit of work. The current unit of work must be terminated by a rollback operation and a new unit of work must be initiated before any SQL operations can be performed.

Restart the current unit of work.

Destination: 56062

-950 THE LOCATION NAME SPECIFIED IN THE CONNECT STATEMENT IS INVALID OR NOT LISTED IN THE COMMUNICATIONS DATABASE

Explanation: One of the following conditions applies:

- The location name is blank.
- The data type of the host variable is not character string.
- The length attribute of the host variable is greater than 16.
- The location name does not appear in the LOCATIONS column of the SYSIBM.LOCATIONS table, nor is it the name of the local DB2 subsystem.

System Action: The statement cannot be executed. The application process is placed in the unconnected state.

Programmer Response: If the location name is specified as the value of a host variable, ensure that the name is left justified in the host variable and, if necessary, padded on the right with blanks. If this is not the problem, either SYSIBM.LOCATIONS must be updated to include the specified name, or the specified name must be changed to match a name in SYSIBM.LOCATIONS.

Destination: 42705

-981 THE SQL STATEMENT FAILED BECAUSE THE RRSAF CONNECTION IS NOT IN A STATE THAT ALLOWS SQL OPERATIONS, REASON reason-code.

Explanation: The application attempted to execute an SQL operation but the RRSAF connection was not in a state that allows the processing of SQL statements.

System Action: The statement cannot be executed.

Programmer Response: See reason-code in "Section 4. DB2 Codes" on page 577 for an explanation of the problem. Correct the error in the application, REBIND, and run the application again.

Destination: 57015
-991  CALL ATTACH WAS UNABLE TO ESTABLISH AN IMPLICIT CONNECT OR OPEN TO DB2.
RC1= rc1 RC2= rc2
Explanation: Call attach attempted to perform an implicit connect and open as the result of an SQL statement. The connect or open failed with the returned values.
rc1  The value returned in FRBRC1 for the failed CONNECT or OPEN request.
rc2  The value returned in FRBRC2 for the failed CONNECT or OPEN request.
System Action: The statement cannot be executed.
Programmer Response: Verify that the application intended to use the call attachment facility (CAF) as the mechanism to connect to DB2. For functions or stored procedures running in the WLM-established stored procedure address space the application must be link-edited with or dynamically allocate the RRS attachment language interface module (DSNRLI), not CAF.
Destination: 57015

# 1760 CREATE PROCEDURE FOR procedure-name
# MUST HAVE VALID LANGUAGE AND EXTERNAL CLAUSES
Explanation: A LANGUAGE or EXTERNAL clause is missing in the CREATE statement for procedure procedure-name. This clause must be specified.
System Action: The statement cannot be executed.
Programmer Response: Change the CREATE statement to include the missing clause and reissue the statement.
Destination: 42601

-2001 THE NUMBER OF HOST VARIABLE PARAMETERS FOR A STORED PROCEDURE IS NOT EQUAL TO THE NUMBER OF EXPECTED HOST VARIABLE PARAMETERS. ACTUAL NUMBER sqldanum, EXPECTED NUMBER opnum
Explanation: DB2 received an SQL CALL statement for a stored procedure. However, the number of host variable parameters supplied on the CALL statement does not match the expected number of host variable parameters.
sqldanum  The number of host variable parameters as determined by examining the SQLDA.
opnum  The expected number of host variable parameters as determined by parsing the statement.
System Action: The statement cannot be executed.
Programmer Response: If the SQL CALL statement is coded incorrectly, modify the SQL application to provide the correct number of parameters on the SQL CALL statement.
Destination: 53089

-2003 GBPCACHE NONE CANNOT BE SPECIFIED FOR TABLESPACE OR INDEX IN GRECP
Explanation: GBPCACHE NONE was specified on an ALTER TABLESPACE or ALTER INDEX statement, but the table space, index, or the partition to be altered is in GRECP.
System Action: The statement cannot be processed.
User Response: Use the START DATABASE command to recover the table space or index from the GRECP then STOP the table space or index before reissuing the ALTER statement.
Destination: 560A7

-2004 8K or 16K BUFFERPOOL PAGESIZE INVALID FOR A WORKFILE OBJECT
Explanation: This message is issued when:
  • A CREATE or ALTER DATABASE statement for a workfile database specifies an 8K or 16K pagesize in the BUFFERPOOL clause.
  • A CREATE or ALTER TABLESPACE statement for a workfile database specifies an 8K or 16K pagesize in the BUFFERPOOL clause.
System Action: The statement cannot be executed.
User Response: Correct the statement to specify a 4K or 32K bufferpool pagesize.
Destination: 560A8

-2005 THE INTERNAL ID LIMIT OF limit HAS BEEN EXCEEDED FOR OBJECT TYPE object-type
Explanation: An internal ID is used to uniquely identify objects of type object-type. The limit for internal IDs for this type of object is limit and this limit has been exceeded.
This could occur during a CREATE DISTINCT TYPE, a CREATE FUNCTION, or a CREATE PROCEDURE statement.
This could also occur during processing for a CREATE TABLE or ALTER TABLE ADD COLUMN statement where a new identity column is created.
System Action: The SQL statement cannot be executed.
Destination: 54035

-2006 LOBS CANNOT BE SPECIFIED AS PARAMETERS WHEN NO WLM ENVIRONMENT IS SPECIFIED
Explanation: On a CREATE PROCEDURE statement, one or more LOBs (or distinct types based on LOBs) were specified in the parameter list, and the NO WLM ENVIRONMENT option was also specified.
Option NO WLM ENVIRONMENT cannot be used with LOBs in the parameter list for a stored procedure.
System Action: The statement is not executed.
Programmer Response: Either do not specify a LOB as a parameter, or specify a WLM ENVIRONMENT name rather than NO WLM ENVIRONMENT on your CREATE PROCEDURE statement.
Destination: 53097
-20008  UNSUPPORTED OPTION keyword SPECIFIED
Explanation:  keyword is a deprecated feature that was supported in releases prior to DB2 Version 6, and is no longer supported.
For indexes, only one type is currently supported — type 2.
System Action:  The statement cannot be executed.
Programmer Response:  Correct the syntax of the SQL statement to remove reference to the unsupported keyword. Refer to the DB2 SQL Reference for more information.
Destination:  560A9

-20070  AUXILIARY TABLE table-name CANNOT BE CREATED BECAUSE COLUMN column-name IS NOT A LOB COLUMN
Explanation:  An auxiliary table cannot be created for a non-LOB column. A CREATE AUXILIARY TABLE statement must refer to a LOB column in the associated base table.
System Action:  The statement cannot be executed. The specified table was not created.
Programmer Response:  Change the name of the column to correctly refer to a LOB column in the base table.
Destination:  53098

-20071  WLM ENVIRONMENT NAME MUST BE SPECIFIED function-name
Explanation:  The WLM ENVIRONMENT option was not specified on CREATE FUNCTION, and there is no default WLM environment for the installation.
System Action:  The statement could not be processed.
Programmer Response:  Select a WLM ENVIRONMENT name and include it in the CREATE FUNCTION statement. Contact your system administrator to find out the names of the WLM environments that have been defined for your installation.
Destination:  53099

-20072  csect-name bind-type bind-subtype ERROR USING auth-id AUTHORITY OPERATION IS NOT ALLOWED ON A TRIGGER PACKAGE package-name
Explanation:  The package specified is a trigger package. The bind-type operation cannot be performed against a trigger package using this statement or subcommand.
  csect-name Name of the CSECT that issued the message.
  bind-type Type of bind operation (BIND, REBIND, DROP, or FREE).
  bind-subtype Subtype of bind operation (COPY or blank).
  auth-id Authorization ID of the invoker of the BIND, REBIND or FREE subcommand or primary authorization ID of the currently executing process for a DROP statement.
  package-name Name of the package in the following format: 'collection.package'.
System Action:  The statement cannot be executed.

-20074  THE OBJECT object-name CANNOT BE CREATED BECAUSE THE FIRST THREE CHARACTERS ARE RESERVED FOR SYSTEM OBJECTS
Explanation:  In general, SYS is a reserved prefix for names. The only exceptions are:
  • SYSPROC is a valid schema name for stored procedures.
  • SYSADM is a valid schema name.
  This condition is similar to the condition reported in precompiler message DSNH794I.
  This message is also issued if an attempt is made to grant the CREATEIN, ALTERIN or DROPIN privileges on a schema with the SYS prefix. The same exceptions apply to the grant.
System Action:  The statement is not executed.
Programmer Response:  Select a name that does not start with a reserved prefix.
Destination:  42939

-20091  A VIEW NAME WAS SPECIFIED AFTER LIKE IN ADDITION TO THE INCLUDING IDENTITY COLUMN ATTRIBUTES CLAUSE
Explanation:  The LIKE clause specified the name of a view in combination with the INCLUDING IDENTITY COLUMN ATTRIBUTES clause. This usage is not supported.
System Action:  The statement is not executed.
Programmer Response:  Remove the INCLUDING IDENTITY COLUMN ATTRIBUTES clause and resubmit the statement to copy the existing view definition without the identity column attributes.

-20092  NO VIEW NAME WAS SPECIFIED AFTER LIKE IN ADDITION TO THE INCLUDING IDENTITY COLUMN ATTRIBUTES CLAUSE
Explanation:  For indexes, only one type is currently supported — type 2.
System Action:  The statement cannot be executed.
Programmer Response:  Correct the syntax of the SQL statement to remove reference to the unsupported keyword. Refer to the DB2 SQL Reference for more information.
Destination:  560A9
-2002 CREATE OR ALTER STATEMENT FOR USER-DEFINED FUNCTION function-name
# SPECIFIED THE option OPTION WHICH IS NOT ALLOWED FOR THE TYPE OF FUNCTION

Explanation: An option was specified that is not allowed for the type of function being created or altered.
- MODIFIES SQL DATA is not allowed for table functions.
- ALLOW PARALLEL is not allowed for table functions.
- CARDINALITY is not allowed for non-table functions.

System Action: The statement cannot be executed.


Possible values for rc are: 00E73001, 00E73002, 00E73003, and 00E73004.

System Action: The statement cannot be executed.

Programmer Response: Correct the condition described by the DB2 reason code.

Destination: 56059
reason

01 IEEE (BFP) floating point instructions or instruction emulation is not available. This support is called the basic-floating-point-extensions facility, and is discussed in detail in ESA/390 Principles of Operation, SA22-7201-05 (and subsequent updates).

System Action: The statement cannot be executed.

Programmer Response: This host variable or parameter requires machine instructions that are not available on this machine. These instructions must be available to DB2 to perform the requested operation. Run this statement on a machine that is capable of supporting the required operations. Contact your system administrator.

Destination: 53022

-20110 CANNOT IMPLICITLY CONNECT TO A REMOTE SITE WITH A SAVEPOINT OUTSTANDING

Explanation: The statement referenced an object at a remote DBMS with an alias or a three-part name when an active savepoint exists. Such a reference requires an implicit connection to the remote DBMS, which is not allowed when there is an outstanding savepoint.

System Action: The statement is not executed.

Programmer Response: Either release the savepoint, or move the data.

Destination: 51036

-20111 CANNOT ISSUE SAVEPOINT, RELEASE SAVEPOINT, ROLLBACK TO SAVEPOINT FROM A TRIGGER OR FROM A GLOBAL TRANSACTION

Explanation: SAVEPOINT, RELEASE SAVEPOINT, and ROLLBACK TO SAVEPOINT statements can not be used in the body of a trigger or a global transaction.

System Action: The statement is not executed.

Programmer Response: Correct the logic of the application program so that this error does not occur.

Destination: 3B503

-20129 LOCAL SPECIAL REGISTER IS NOT VALID AS USED

Explanation: An assignment statement (SET or VALUES INTO) that assigns multiple values cannot reference local special registers. For example, the following special registers are local: CURRENT SERVER and CURRENT PACKAGESET. Additionally, a SET host-variable statement that has parenthesis around the special register cannot reference the local special registers.

The following statements are not valid:

SET (:hv1) = (CURRENT SERVER);

SET (:hv1,:hv2) = (CURRENT SERVER,CURRENT PATH);

VALUES CURRENT SERVER, CURRENT DATE INTO :c1,:c2;

Severity: 8 (error)

System Action: DB2 cannot process the statement.

Programmer Response: Split the statement into multiple statements so that the local special registers are not referenced in a statement that assigns multiple values. Also be sure that a SET statement for a local special register does not use parenthesis on either side of the equal sign.

Destination: 560B5

-30000 EXECUTION FAILED DUE TO A DISTRIBUTION PROTOCOL ERROR THAT WILL NOT AFFECT THE SUCCESSFUL EXECUTION OF SUBSEQUENT COMMANDS OR SQL STATEMENTS: REASON reason-code (sub-code)

Explanation: A DRDA protocol error has resulted which prevented successful execution of the current SQL statement. The error was such that it will not preclude the successful execution of further SQL statements.

System Action: The statement cannot be executed. The SOLCA is formatted. Message DSNL031I or DSNL032I, which might contain additional diagnostic information, might be issued to the MVS console.

Programmer Response: Notify the DBA for assistance in analysis of the SQL statement which yielded this SQLCODE.

Problem Determination: The 'reason-code' identifies the DDM code point which represents the DDM reply message received from the remote server in response to the attempt to execute the SQL statement. These represent internal errors detected at the remote server or possibly, by the local DB2 functions.

The 'reason-code' value is the two-byte hexadecimal code point for the DDM reply message that represents the error and is one of the following:

X'1254' - CMDCHKRM
X'220A' - DSCINVTRM
X'220E' - DTAMCHRM
X'124F' - PRCCNVRM
X'2202' - QRYNOPRM
X'220F' - QRYOPPRM
X'2207' - RDBACCRM
X'2204' - RDBNACRM
X'124C' - SYNTAXRM

A two-byte 'sub-code' accompanies 'reason-codes' X'220A' (DSCINVTRM), X'124F' (PRCCNVRM), and X'124C' (SYNTAXRM). In all other cases, the 'sub-code' is zero. The 'sub-code' when nonzero, consists of two bytes such that the high-order byte indicates the site at which the error was detected. This is X'01' if the error was detected by the local DB2; it is X'02' if the error was detected by the remote server. The low-order byte is dependent on the 'reason-code' as follows:

1. Description Error Code (DSCERRCD) if 'reason-code' = X'220A' (DSCINVTRM).

Refer to the IBM Distributed Data Management (DDM) Reference Guide for a detailed discussion of the semantics of the DDM terms DSCERRCD, SYNERCDD, and PRCCNVCD.
**SQL Return Codes**

### -30020

**Explanation:** A DRDA protocol error has occurred that prevented the successful execution of the current SQL statement or command, as well as any subsequent SQL statements.

The 'reason-code' identifies the DDM code point which represents the DDM reply message received from the remote server in response to the attempt to execute the SQL statement. These represent internal errors detected at the remote server.

The 'reason-code' value is the two-byte hexadecimal code point for the DDM reply message that represents the error and is one of the following:

- X'1232' - AGNPROMR
- X'1254' - CMDCHKRM
- X'220A' - DSCINVRM
- X'220E' - DTAMCHRM
- X'0010' - FDODSC
- X'1218' - MGRDEPRM
- X'1245' - PRCCNVRM
- X'241A' - QRYDSC
- X'2202' - QRYNOPRM
- X'220F' - QRYPOP RM
- X'2207' - RDBACCRM
- X'2204' - RDBNACRM
- X'124C' - SYNTAXRM

A two byte sub-code accompanies 'reason codes'. The sub-code, when nonzero, consists of two bytes such that the high-order byte indicates the site at which the error was detected. This is X'01' if the error was detected by the local DB2; It is X'02' if the error was detected by the remote server. The low-order byte is dependent upon the 'reason code' as follows:

- Description Error Code (DSCERRCD) if reason code = X'220A' (DSCINVRM).
- Syntax Error Code (SYNERRCD) if reason code = X'124C' (SYNTAXRM).
- Conversational Protocol Error Code (PRCCNVCD) if reason code = X'1245' (PRCCNVRM).
- Manager Dependency Error Code (DEPERRCD) if reason code = X'1218' (MGRDEPRM).

Refer to IBM Distributed Data Management (DDM) Reference Guide for a detailed discussion of the semantics of the DDM terms DSCERRCD, SYNERCD, PRCCNVCD, and DEPERRCD.

**System Action:** The SQL statement cannot be executed. The SQLCODE is formatted and the conversation on which the error was detected is deallocated. Message DSNL031I or DSNL032I, which might contain additional diagnostic information, might be issued to the MVS console.

**Programmer Response:** The connection to the server has been broken, and the server has, therefore, rolled back the unit of work. In this case, the only SQL statement that may be successfully executed is ROLLBACK. However, if the requester detects this error on a COMMIT, then it is unknown whether the unit of work was committed or rolled back at the server.

**Destination:** 58009

---

**-30021**

**Explanation:** A DRDA error occurred that prevented the successful execution of the current SQL statement or command and any subsequent SQL statements.

A manager-level conflict was detected during the processing of the DDM EXCSAT command. Refer to the IBM Distributed Data Management (DDM) Reference Guide for a detailed description of EXCSAT processing and errors.

The 'manager' value is the 2-byte hexadecimal code point of the DDM manager class identified as not supported in the EXCSATRD that reported the error. Refer to the DDM term MGRRLVL in the IBM Distributed Data Management (DDM) Reference Guide for the 2-byte hexadecimal values.

The 'level' value is the 2-byte hexadecimal value of the manager level identified as not supported in the EXCSATRD that reported the error. Refer to the DDM term MGRRLVL in the IBM Distributed Data Management (DDM) Reference Guide for the 2-byte hexadecimal values.

**System Action:** The statement cannot be executed.

**Programmer Response:** Notify the system programmer for analysis of the condition that caused this SQLCODE.

**Destination:** 58010

---

**-30030**

**Explanation:** The application requested COMMIT operation was unsuccessful and the response from the remote server and the SQLCODE that was returned from the remote server are inconsistent. For example, the reply message from the remote server indicates that a COMMIT operation did not complete successfully but the SQLCODE returned from the remote server was greater than or equal to zero. The unit of work has been rolled back and the connection with the remote server has been deallocated.

**SQL Return Codes** 111
Collect the following diagnostic items to help determine the cause of the unavailable resource.

- Console output from the system identified by RDBNAME, and a listing of SYSLOG data set for the period of time spanning the failure.
- Information described for the reason code received.

**Destination:** 57012

---

**-30041**

**EXECUTION FAILED DUE TO UNAVAILABLE RESOURCES THAT WILL AFFECT THE SUCCESSFUL EXECUTION OF SUBSEQUENT COMMANDS AND SQL STATEMENTS.**

**REASON** <reason-code>  **TYPE OF RESOURCE** <resource-type>  **RESOURCE NAME** <resource-name>  **PRODUCT ID** <pppvvrrm>  **RDBNAME** <rdbname>

**Explanation:** The SQL statement or command requires a non RDB resource that is currently unavailable. The <reason-code> identifies why the resource identified by the <resource-type> and <resource-name> is unavailable. The product, product level, and RDB are identified.

**Values for <reason-code>**

Four byte binary number that is product specific. This can be found in the remote server documentation.

**Values for <resource-type>**

Two byte hexadecimal number that is product specific. This can be found in the remote server documentation.

**Values for <resource-name>**

Variable length field with alphanumeric characters and a maximum length of 35 bytes.

**Values for <pppvvrrm>**

Eight byte field with alphanumeric characters defined as follows:

- ppp... DSN for DB2, ARI for SQL/DS, SQL for OS/2 and QSQ for AS/400 (3 bytes)
- vv...... version number (2 bytes)
- rr....... release level (2 bytes)
- m........ modification level (1 byte)

**Values for <rdbname>**

Sixteen byte field with the RDBNAME.

**System Action:** The statement cannot be executed. The local DB2 is disconnected from the remote server.

**Programmer Response:** Verify the identity of the resource that was not available. The reason the resource is unavailable is identified by the <reason-code>.

**Destination:** 57013

---

**-30040**

**EXECUTION FAILED DUE TO UNAVAILABLE RESOURCES THAT WILL NOT AFFECT THE SUCCESSFUL EXECUTION OF SUBSEQUENT COMMANDS OR SQL STATEMENTS.**

**REASON** <reason-code>  **TYPE OF RESOURCE** <resource-type>  **RESOURCE NAME** <resource-name>  **PRODUCT ID** <pppvvrrm>  **RDBNAME** <rdbname>

**Explanation:** The SQL statement or command requires a non RDB resource that is currently unavailable. The <reason-code> identifies why the resource identified by the <resource-type> and <resource-name> is unavailable. The product, product level, and RDB are identified.

**Values for <reason-code>**

This is product specific and can be found in the remote server documentation.

**Values for <resource-type>**

Two byte hexadecimal number defined as follows:

- This is product specific and can be found in the remote server documentation.

**Values for <resource-name>**

Variable length field with alphanumeric characters and a maximum length of 35 bytes.

**Values for <pppvvrrm>**

Eight byte field with alphanumeric characters defined as follows:

- ppp... DSN for OS/390, ARI for SQL/DS SQL and QSQ for AS/400 (3 bytes)
- vv...... version number (2 bytes)
- rr....... release level (2 bytes)
- m........ modification level (1 byte)

**Values for <rdbname>**

Sixteen byte field with the RDBNAME.

**System Action:** An alert was generated. A DSNL0311 message may have been written to the console. Refer to the description of this message for further information.

The SQLCODE returned by the remote server is replaced with -30030 and the SQLSTATE returned by the AS is replaced with ’158013’ and the connection with the remote server has been deallocated.

The SQLCODE and SQLSTATE values that were returned from the remote server are stored in the SQLERRM field in a string of the following format:

- original-sqlcode 'FF'X original-sqlstate'

**Programmer Response:** Notify the system programmer for assistance in analyzing the trace data that was generated.

**Destination:** 58013
-30050  <command-or-SQL-statement-type> COMMAND OR SQL STATEMENT INVALID WHILE BIND PROCESS IN PROGRESS

Explanation: A remote command or remote SQL execution was attempted while a remote bind was in progress. The only commands allowed during bind are, BIND STATEMENT, END BIND, ROLLBACK, or COMMIT.

System Action: The request is rejected. The local DB2 is disconnected from remote server.

Programmer Response: Ensure the remote bind has completed before attempting to execute an SQL statement or process a remote command. COMMIT and ROLLBACK will terminate the bind processing.

Destination: 58011

-30051  BIND PROCESS WITH SPECIFIED PACKAGE NAME AND CONSISTENCY TOKEN NOT ACTIVE

Explanation: Binding of a statement or end bind was attempted while the package was not undergoing bind processing.

System Action: The bind statement request or end bind request is rejected. The local DB2 is disconnected from the remote server.

Programmer Response: Ensure that the server processing the bind request was not abending when this request was being processed, or that the package name hasn't changed before terminating the remote bind package request.

Destination: 58012

-30052  PROGRAM PREPARATION ASSUMPTIONS ARE INCORRECT

Explanation: The program preparation assumptions in effect for binding a statement (i.e. BINDSQLSTT command) are incorrect.

System Action: The statement is rejected.

Programmer Response: The creation of the package following this error is dependent on the package creation options specified at begin bind time.

Destination: 42932

-30053  OWNER AUTHORIZATION FAILURE

Explanation: An authorization error associated with the package owner is detected. The AS, for example, has determined that the binder has specified a package owner that the binder has no authorization to specify.

System Action: The begin bind request is rejected.

Programmer Response: Correct the authorization problem and reissue the request.

Destination: 42506

-30060  RDB AUTHORIZATION FAILURE

Explanation: The user is not authorized to access an RDB.

System Action: The request is rejected.

Programmer Response: Correct the authorization problem and resubmit the job.

Destination: 08004

-30061  RDB NOT FOUND

Explanation: An attempt was made to access an RDB which cannot be found. This usually means that a requester specified the server location name incorrectly. The server responded by indicating that the requester’s specification of the server location name is incorrect. Requester or server changes are needed to make the location names consistent. Location names for DB2 systems are defined in the BSDS DDF record and are also in the DSNL004I console message when DDF is started. For more information about defining location names, see Section 3 of DB2 Installation Guide.

System Action: The request is not processed.

Programmer Response: Ensure the RDB name was correctly specified and resubmit the job.

Destination: 08004

-30070  <command> COMMAND NOT SUPPORTED ERROR

Explanation: The target does not support a particular command. The error causes termination of the connection between the local DB2 and the remote server.

Values for <command>:

Two byte hexadecimal DDM code point.

System Action: The command is rejected. The local DB2 is disconnected from the remote server.

Programmer Response: Ensure the proper command was issued.

Destination: 58014

-30071  <object-type> OBJECT NOT SUPPORTED ERROR

Explanation: The target does not support a particular object. The error causes the termination of the connection between the local DB2 and the remote server.

Values for <object-type>:

Two byte hexadecimal DDM code point.

System Action: The command/SQL statement is rejected. The local DB2 is disconnected from the remote server.

Programmer Response: Ensure the object has been correctly specified and resubmit the job or reissue the command.

Destination: 58015
-30072 <parameter>;<subcode> PARAMETER NOT SUPPORTED ERROR

Explanation: A particular parameter is not supported by either the application requester or the remote server.

Values for <parameter>
Two byte hexadecimal DDM code point.

Values for <subcode>
Two byte hexadecimal number defined as follows: This subcode is composed of two distinct parts, but may optionally be zero. The high-order byte (when not zero) indicates the site at which the error was detected. This is X'01' if the error was detected by the local DB2; it is X'02' if the error was detected by the remote server. The low order byte is always zero.

System Action: The command/SQL statement is rejected. A disconnect has occurred.

Programmer Response: The connection to the server has been broken, and the server has therefore rolled back the unit of work. In this case, the only SQL statement that may be successfully executed is ROLLBACK. However, if the requester detects this error on a COMMIT, then it is unknown whether the unit of work was committed or rolled back at the server.

Destination: 58016

-30073 <parameter>;<subcode> PARAMETER VALUE NOT SUPPORTED ERROR

Explanation: The specified parameter value is not supported by either the local DB2 or the remote server.

The parameter, is a 2-byte hexadecimal DDM code point. See IBM Distributed Data Management (DDM) Reference Guide for a definition of the valid code points. Common values for parameter include:

X'0035' Usually means that a DB2 server does not support the single-byte coded character set identifier (CCSID) sent by the requester, or a DB2 requester does not support the single-byte CCSID received from a server. See X'119C' for more information.

X'1144' DRDA servers return this code point when a DB2 client specifies a version for a package and the DRDA server does not support versions.

X'119C' If the subcode information contains X'01', the requester does not support the single-byte CCSID that the server wants to use. If the subcode information contains X'02', the server does not support the single-byte CCSID that the requester wants to use.

Determine the single-byte CCSIDs for the requester and server systems. The single-byte CCSID for DB2 subsystems is defined in DSNHDCP. One or both partners might be using an incorrect CCSID, or support might need to be added. See DB2 Installation Guide for more information on CCSIDs.

X'147A' DB2 servers can return this code point when a numeric input host variable is not within the range that DB2 supports. See the explanation of SQLCODE -406 for more information.

X'14AC' DB2 servers return this code point when a DRDA client requests an authentication mechanism that is not supported by the DB2 server. See the explanation of DB2 reason code 00D3010E for more information.

X'2110'. Usually means that a requester specified the server location name incorrectly. The server responded by indicating that the requester's specification of the server location name is incorrect, and the length of the location name is longer than that supported by the server. Requester or server changes are needed so the location names are consistent. Location names for DB2 systems are defined in the BSDS DDF record and can also be seen in the DSNL004I console message when DDF is started. See Section 3 of DB2 Installation Guide for more information about defining location names.

X'2120' Usually means that the server does not support the use of double quote string delimiters in SQL statements. DB2 COBOL applications can use double quote string delimiters in SQL statements. This requires that the program be precompiled with the SQLDELIM(QUOTESQL) option. If the server product does not support double quote SQL statement string delimiters, then the program must be modified to use single quote SQL string delimiters and be precompiled with the SQLDELIM(APOSTSQL) option.

X'2121' Usually means that there is a semantic error with the string that specifies the character used as a decimal delimiter in SQL statements.

X'213F' Means that the server was processing a bind or rebind command that specified an unsupported value for the DYNAMICRULES bind parameter. If the server is a DB2 Version 3 system, specify DYNAMICRULES(RUN) or omit the DYNAMICRULES parameter.

The 'subcode', which is a 2-byte hexadecimal number, consists of two distinct parts and can optionally be zero. The high-order byte (when not zero) indicates the site at which the error was detected. If the error was detected by the local DB2, it is X'01'. If the error was detected by the remote server, it is X'02'. The low-order byte is always zero.

System Action: The command or SQL statement is rejected. A disconnect occurred.

Programmer Response: The connection to the server was broken, and the server rolled back the unit of work. The only SQL statement that can be successfully executed is ROLLBACK. However, if the requester detects this error on a COMMIT, then it is unknown whether the unit of work was committed or rolled back at the server.

Destination: 58017

-30074 REPLY MESSAGE WITH codepoint (svrcod) NOT SUPPORTED ERROR

Explanation: A reply message codepoint is not recognized or the reply message SVRCOD is not recognized. The error does not affect the processing of subsequent DRDA commands and SQL statements issued by the application program.

Values for codepoint
- The codepoint is a two-byte hexadecimal value that repres-
Entries a DDM reply message. IBM Distributed Data Management (DDM) Reference Guide defines the valid codepoints for reply messages.

Values for SVRCOD

- The SVRCOD is a one-byte hexadecimal value which represents the reply messages severity code. IBM Distributed Data Management (DDM) Reference Guide defines the valid SVRCOD for reply messages.

System Action: Processing continues.

Programmer Response: The cause of this error may be a mismatch in source and target manager levels or might be an internal error.

Destination: 58018

-30080 COMMUNICATION ERROR code (subcode)

Explanation: A SNA communications error was detected. VTAM for MVS/ESA Programming for LU 6.2 contains the valid code and subcode values that can appear in this message.

- code is VTAM's primary LU6.2 return code (RCPRI).
- subcode takes one of the following forms:
  - rcsec-sense
  - rcsec

  The rcsec portion of subcode is VTAM's secondary LU6.2 return code (RCSEC).

  The sense portion of subcode is VTAM's sense code. See Section 6. SNA CODES on page 1039 for descriptions of sense codes that are often associated with SNA network definition errors.

System Action: The statement is not executed. The application was disconnected from the server because of a communication failure. A DSNL500I message containing additional diagnostic information might be issued to the MVS console.

Programmer Response: Review the diagnostic information described in VTAM for MVS/ESA Programming for LU 6.2 for the particular LU6.2 return codes. Consult with a communications expert to determine the cause of the communication failure.

Destination: 08001

-30081 PROT COMMUNICATION ERROR DETECTED.

Explanation: A communications error was detected while communicating with a remote client or server.

- prot Identifies the communication protocol that encountered the error. Currently, 'TCP/IP' is the only possible value.
- api Identifies the communication application programming interface (API) used by DB2. Currently, 'SOCKETS' is the only possible value.
- loc The network location of the partner system.
- func The communication function that failed.

For TCP/IP partners, this field contains the dotted decimal IP address of the partner.

For TCP/IP partners, this field identifies name of the socket that failed.

rc1 The first return code indicator.

For TCP/IP partners, this field contains the TCP/IP return code in decimal format. The return code values are documented in OS/390 UNIX System Services Programming: Assembler Callable Services Reference.

rc2 The second return code indicator.

For TCP/IP partners, this field contains the TCP/IP reason code in decimal format. The reason code values are documented in OS/390 UNIX System Services Programming: Assembler Callable Services Reference.

rc3 The third return code indicator.

For TCP/IP partners, this field contains zero.

System Action: The statement is not executed. The application is disconnected from the server.

Programmer Response: Consult with a communications expert to determine the cause of the communication failure.

Destination: 08001

-30082 CONNECTION FAILED FOR SECURITY REASON reason-code (reason-string)

Explanation: The attempt to connect to a remote database server was rejected due to invalid or incorrect security information. The cause of the security error is described by the reason-code and reason-string values.

The possible values for reason-code and reason-string appear below:

- 1 (PASSWORD EXPIRED) -- the password used to connect to the remote server has expired.
- 2 (PASSWORD INVALID) -- the password used to connect to the remote server does not match the password stored at the remote server.
- 3 (PASSWORD MISSING) -- the remote server rejected the connection request because the request did not include a password.
- 4 (PROTOCOL VIOLATION) -- the remote server rejected the connection request because the request did not contain the proper security information. Error messages or trace records should be produced by the server system to explain the nature of the security violation.
- 5 (USER-ID MISSING) -- the remote server rejected the connection request because the request did not specify a user-id.
- 6 (USER-ID INVALID) -- the user-id specified in the connection request is not defined at the remote server system.
- 7 (USER-ID REVOKED) -- the user-id specified in the connection request has expired.
- 15 (SECURITY FAILURE:secchkcd:svcerrno) -- Authentication failed at the remote server system. Refer to the IBM Distributed Data Management (DDM) Reference Guide and SVCERRNO.
- 16 (NEW PASSWORD INVALID) -- the password specified on a change password request did not meet the server's requirements.
• 17 (UNSUPPORTED FUNCTION) -- the security mechanism specified by the client is invalid for this server. Some typical examples:
  – The client sent a new password value to a server that does not support the DRDA change password function.
  – The client sent DCE authentication information to a server that does not support DCE.
  – The client is configured to send an Already Verified userid but the server does not support Already Verified userids. Client or server changes must be made to correct the inconsistency.
    - DB2 for OS/390 server acceptance of Already Verified userids over TCP/IP connections is controlled by the TCPALVER value of the DSNTIP5 installation panel (DSN6FAC TCPALVER).
    - DB2 for OS/390 client usage of Already Verified userids is controlled by the SECURITY_OUT column of the SYSIBM.LUNAMES or SYSIBM.IPNAMES tables.

System Action: The attempt to connect to the remote database server fails. If the server system is a DB2 for OS/390 server, a DSNL030I message at the server system describes the cause.

Programmer Response: DB2 uses the communications database (CDB) to control network security functions. Make the appropriate changes to the CDB to correct the security failure.

Destination: 08001

-30090 REMOTE OPERATION INVALID FOR APPLICATION EXECUTION ENVIRONMENT

Explanation: An update operation or a dynamic commit or rollback was attempted at a server that was supporting an application that was in a read-only execution environment (IMS or CICS).

System Action: The request is rejected.

Programmer Response: Do not attempt to update data or issue dynamic commits or rollbacks from IMS or CICS applications that are accessing remote data.

Destination: 25000

-30104 ERROR IN BIND OPTION option AND BIND VALUE value.

Explanation: While processing the bind parameters that were passed from the requester site, either the bind option or the bind value is not acceptable to the server database, or the option/value pair is not appropriate.

Programmer Response: The BIND or REBIND command failed. Examine the command options and values, determine the error, and resubmit the command.

Destination: 56095

-30105 BIND OPTION option1 IS NOT ALLOWED WITH BIND OPTION option2

Explanation: While processing the bind parameters that were passed from the requester site, it was found that there is a conflict in bind options that are mutually exclusive.

Programmer Response: The BIND or REBIND command failed. Examine the command options, determine the cause of the conflict, and resubmit the command.

Destination: 56096
Section 3. DB2 Messages

DB2 Messages ............................................. 119
DSNA... Messages ............................... 121
DSNB... Messages ............................... 123
DSNE... Messages ............................... 161
DSNF... Messages ............................... 181
DSNH... Messages ............................... 183
Message line numbers ......................... 183
Message severity codes ....................... 183
Source tokens in messages .................... 183
DSNI... Messages ............................... 213
DSNJ... Messages ............................... 219
DSNL... Messages ............................... 255
DSNM... Messages ............................... 293
DSNN... Message ............................... 295
DSNP... Messages ............................... 297
DSNR... Messages ............................... 307
DSNT... Messages ............................... 315
DSNU... Messages ............................... 369
DSNV... Messages ............................... 467
DSNW... Messages ............................... 483
DSNX... Messages ............................... 495
DSNY... Messages ............................... 509
DSNZ... Messages ............................... 511
DSN1... Messages ............................... 513
DSN2... Messages ............................... 537
DSN3... Messages ............................... 545
DSN7... Messages ............................... 555
DSN8... Messages ............................... 561
DSN9... Messages ............................... 571
Refer to ["Section 1. Introduction" on page 1] for a description of message types and message numbering conventions.

Unless the message is issued by a subcomponent operating outside the DB2 environment, messages are preceded by a *command prefix* that is defined during system installation. The command prefix is not shown in the message texts in this book.

In the TSO attachment facility, the user can control whether message IDs are displayed. To see them, type `PROFILE MSGID`. To suppress them, type `PROFILE NOMSGID`.
DSNA... Messages

The messages in this chapter are written to the trace. They are seen only if the trace is turned on (that is, ddname DSNTRACE was allocated to SYSOUT or the TSO terminal).

DSNA... messages share a basic structure. Here are the message elements, listed in order:

1. Message number (DSNAnnn).
2. The name of the CSECT responsible for writing the message.
3. TCB address of the task currently executing.
4. A series of tokens and token-explanations unique to each message.

Note: The intent of these messages is to aid IBM development and the IBM Support Center. They contain information that might not be meaningful except to IBM.

Problem Determination: See a DSNTRACE trace stream to understand the context of this message.

DSNA002E DSNACA00 TCB=address SYSTEM ERROR - FOUND UNEXPECTED THREAD
Explanation: The DB2 call attachment facility control block, the CAB, indicated that a thread was present when none should have been present. This is a CAF system error.
This message is issued by the following CSECT: DSNACA00
System Action: This message immediately precedes an 04E abend, with reason code 00C10002.
System Programmer Response: Collect a SYSUDUMP and DSNTRACE trace stream.
Programmer Response: Refer the problem to your system programmer.
Problem Determination: Contact your IBM Support Center.

DSNA201E DSNACA00 TCB=address CANNOT USE 'CONNECT', ALREADY CONNECTED TO DB2
Explanation: A CONNECT request was received but a connection to DB2 already existed for the TCB identified by 'address' in the message. This is a CAF error (application program error). The message is accompanied by return code (R15) 200 and code (R0) 00C10201.
System Action: No new connection is made to DB2 and an error return and reason code are issued. The DB2 call attachment facility is ready for more input.
System Programmer Response: Refer the problem to the programmer using the DB2 call attachment facility.
Programmer Response: You must DISCONNECT the previous connection before you can re-CONNECT. Correct the logic in your code.
Problem Determination: See a DSNTRACE trace stream to understand the context of this message.

DSNA203E DSNACA00 TCB=address CANNOT USE 'CLOSE', THERE WAS NO 'OPEN' IN EFFECT
Explanation: A CLOSE request was received but no OPEN level connection (implicit or explicit) existed for this task. This is a user error. The message is accompanied by return code (R15) 200 and code (R0) 00C10203.
System Action: No CLOSE is performed. The DB2 call attachment facility is ready for more input.
System Programmer Response: Refer the problem to the programmer using the DB2 call attachment facility.
Programmer Response: Correct the logic in your application. Do not issue CLOSE unless an explicit OPEN has been performed. 'Explicit' OPENs occur when an application issues the call attachment facility OPEN request. 'Implicit' OPENs occur when an application issues SQL statements before a DB2 connection was established. Correct the logic in your application program.
Problem Determination: See a DSNTRACE trace stream to understand the context of this message.

DSNA204E DSNACA00 TCB=address CANNOT USE 'DISCONNECT', THERE WAS NO 'CONNECT' IN EFFECT
Explanation: A DISCONNECT request was received but no DB2 connection had been established. This is a user error. The message is accompanied by return code (R15) 200 and code (R0) 00C10204.
System Action: No DISCONNECT has been performed. The DB2 call attachment facility is ready for more input.
System Programmer Response: Refer the problem to the programmer using the DB2 call attachment facility.
Programmer Response: Correct the logic in your application. Do not issue DISCONNECT unless a CONNECT has been performed.

Problem Determination: See a DSNTRACE trace stream to understand the context of this message.

---

**DSNA205E** DSNAACA00 TCB=address CANNOT USE ‘TRANSLATE’, THERE WAS NO CONNECTION TO DB2 OR NOTHING TO TRANSLATE

Explanation: A TRANSLATE request was received but no data was available for translation. You must have valid DB2 call attachment facility control structures before you can make a TRANSLATE request. Control structures are built when you issue explicit or implicit connection requests. This is a user error. The message is accompanied by return code (R15) 200 and code (R0) 00C10205.

System Action: No TRANSLATE is performed. The DB2 call attachment facility is ready for more input.

System Programmer Response: Refer the problem to the programmer using the DB2 call attachment facility.

Programmer Response: Correct the logic in your application. Do not issue TRANSLATE unless a DB2 connection has been attempted.

Problem Determination: See a DSNTRACE trace stream to understand the context of this message.

---

**DSNA206E** DSNAACA00 TCB=address WRONG NUMBER OF PARMS OR VL BIT OFF

Explanation: An erroneous DB2 call attachment facility request was received. The request had too many or too few parameters and could not be processed. The message is accompanied by return code (R15) 200 and code (R0) 00C10206.

System Action: The previous request was not processed. The DB2 call attachment facility is ready for more input.

System Programmer Response: Refer the problem to the programmer using the DB2 call attachment facility.

Programmer Response: Correct the logic in your application. Be sure that any parameter list passed to the DB2 call attachment facility has the correct number of parameters for the individual call, and that the high order (VL) bit is turned on to end the parameter list.

Problem Determination: See a DSNTRACE trace stream to understand the context of this message.

---

**DSNA207E** DSNAACA00 TCB=address DID NOT RECOGNIZE ACTION PARAMETER - parm

Explanation: An unrecognized action request type or parameter was received by the DB2 call attachment facility and could not be processed. The allowable action request types are CONNECT, OPEN, CLOSE, DISCONNECT, and TRANSLATE. For allowable parameters, refer to the CAF section in DB2 Application Programming and SQL Guide. This message is accompanied by return code (R15) 200 and code (R0) 00C10207.

System Action: Control returns to the caller. Your request was not processed. The DB2 call attachment facility is ready for more input.

System Programmer Response: Refer the problem to the programmer using the DB2 call attachment facility.

Programmer Response: Correct the logic in your application. Check the spelling of the action parameter type or keyword on the previous request passed to the DB2 call attachment facility. The action parameter type you passed is listed in the parm field of the DSNA800I trace message. If the error is not the action parameter, the parameter in error is listed in the parm field of this message.

Problem Determination: See a DSNTRACE trace stream to understand the context of this message.

---

**DSNA208E** DSNAACA00 TCB=address CANNOT HAVE 2 SSIDS (ssid1 AND ssid2) FROM 1 TCB

Explanation: An OPEN request was received specifying a different subsystem identifier (ssid2) than the previous CONNECT request (ssid1). Your task can only be connected to a single DB2 subsystem. The message is accompanied by return code (R15) 200 and code (R0) 00C10208.

System Action: Control returns to the caller. Your request was not processed. The DB2 call attachment facility is ready for more input.

System Programmer Response: Refer the problem to the programmer using the DB2 call attachment facility.

Programmer Response: Specify the correct DB2 subsystem identifier on both the OPEN and CONNECT requests.

Problem Determination: See a DSNTRACE trace stream to understand the context of this message.

---

**DSNA209E** DSNAACA00 A STORED PROCEDURE ISSUED AN EXPLICIT CALL TO DSNALI

Explanation: A stored procedure issued an explicit call to DSNALI. This is not allowed. Return code 200 in register 15 and code 00C10209 in register 0 accompany this message.

System Action: Control returns to the caller. The request was not processed. The DB2 call attachment facility is ready for more input.

System Programmer Response: Refer the problem to the programmer using the DB2 call attachment facility.

Programmer Response: Remove explicit calls to DSNALI from the application program.

Problem Determination: See a DSNTRACE trace job stream to understand the context of this message.

---

**DSNA8xx**

Explanation: Messages in the DSNA800 series are intended for diagnosis and are documented in Section 9 of DB2 Diagnosis Guide and Reference.
DSNB... Messages

**DSNB200I** UPDATE VVDS FAILED. DSNAME = *dsn*, MMRC=cccccccc CONNECTION-ID=xxxxxxxxx, CORRELATION-ID=yyyyyyyyyyyyy, LUW-ID=logical-unit-of-work-id=token

**Explanation:** DB2 was unable to update the data set high-used RBA in the VSAM volume data set (VVDS) when it was ready to close a data set that was used by a RECOVER, LOAD, or REORG utility job. The error was detected by the media manager catalog update function that issues system message IEC161I. The *dsn* indicates the DSNAME of the data set. MMRC is the return code that DB2 received from the media manager catalog update service. Refer to *DFSMS/MVS: Diagnosis Reference for DFSMSdfp* for a description of these codes.

The connection ID, correlation ID, and logical-unit-of-work ID (LUW-ID) identify the user or application that encountered the problem.

An LUW-ID of '*' indicates that the thread does not have an LUW-ID. If the LUW-ID is not an '*', the value is a logical-unit-of-work-id that is assigned to the thread followed by an '=' sign and a token value which can be used in place of logical-unit-of-work-id in any DB2 command that accepts logical-unit-of-work-id as input.

**System Action:** DB2 continues closing this data set. However, the utility job is informed with a 00C2010C 'resource unavailable' reason code. The utility job is left in a failed state.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** To determine the cause of the error, refer to system message IEC161I in the appropriate MVS publication. Correct the error, and then notify the user to reinvoke the application.

**Problem Determination:** Collect the following diagnostic items listed in [Appendix B, “Problem determination” on page 1051] 1, 5, 10, 12.

---

**DSNB204I** OPEN OF DATA SET FAILED. DSNAME = *dsn*

**Explanation:** A required data set of a DB2 table or index space could not be opened. The error was detected by the media manager CONNECT function that issues system message IEC161I. The *dsn* indicates the DSNAME of the data set.

After being issued for a given data set, this message is disabled for that data set.

**System Action:** Buffer manager functions that detect this condition terminate and pass a unique error return code.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** To determine the cause of the error, refer to system message IEC161I in the appropriate MVS publication. Correct the error, and reinvoke the application.

**Problem Determination:** Collect the following diagnostic items listed in [Appendix B, “Problem determination” on page 1051] 1, 5, 10, 12.

---

**DSNB207I** DYNAMIC ALLOCATION OF DATA SET FAILED. REASON = *rrr* DSNAME = *dsn*

**Explanation:** A required data set of a DB2 table or index space could not be allocated. Reason code *rrr*, which is returned by dynamic allocation, indicates the reason for the failure. Refer to the appropriate MVS publications for a description of this reason code. The *dsn* indicates the data set's DSNAME.

After being issued for a given data set, this message is disabled for that data set.

This message is issued by the following CSECT: DSNB10ST

**System Action:** Buffer manager functions that detect this condition terminate and pass a unique error return code.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Correct the situation, and then reinvoke the application.

**Problem Determination:** Collect the following diagnostic items listed in [Appendix B, “Problem determination” on page 1051] 1, 5, 10, 12.

---

**DSNB209I** csect-name=BUFFER MANAGER TABLESPACE/INDEXSPACE CLEAN-UP ROUTINE (DSNB1CFC) HAS BEEN SCHEDULED FOR DBNAME = *dbname*, SPACENAME = *spn*, PSID = *psid*

**Explanation:** DB2 detected an abnormal condition for one of the following reasons:

- The associated table space or index space contains modified pages that cannot be written to DASD for a period of time that is longer than expected. This can be caused by either an unusually long period of contiguous update or by an internal logic error.
- This message follows an abnormal termination due to inconsistent data or an incomplete update to the page.

DB2 scheduled the table space or index space cleanup routine (DSNB1CFC) for the associated table space or index space. DSNB1CFC acquires a drain lock to ensure that no updates are in progress. Data is inaccessible to users during the cleanup process.

For recoverable inconsistent pages with unbalanced write intents, DB2 initiates the recovery process and reconstructs the pages using the DB2 log. For other modified pages with unbalanced write intents, the buffer manager forces the pages to be written back to DASD and then makes the buffer space available for reassignment.

The *dbname* indicates the database name with which the table space or index space is associated. The *spn* is the name of the table space or index space that must be cleaned up. The *psid* is the internal identifier for the table space or index space; it is used to associate this message with follow-on message DSNB221I, which might be issued.

**System Action:** DB2 is ready to clean up the associated table space or index space. However, before any cleanup is initiated, DB2 requests a drain on the table space or index space. DB2 waits indefinitely for this lock. Therefore, all activities against the table space and/or index space must be qui-
The message was issued to indicate the start of the recovery process. This message is issued in response to message DSNB212I, which failed. The page is written to DASD as logically inconsistent.

**User Response:** If the clean up activity does not appear to be completed, DB2 might still be waiting for a drain lock on the table space. Issue a -DISPLAY DATABASE CLAIMERS command for the table space in question (for index spaces, this would be the associated table space) to determine whether the clean up routine is still waiting for a lock and if so, to determine the holders of the table space lock. If the jobs are holding the table space lock for a very long duration (for instance, wait-for-input), it might be necessary to cancel those jobs in order to allow the clean up process to proceed.

**System Action:** Processing continues.

**Explanation:**

- **DSNB212I** `csect-name–RECOVER PAGE STARTING` 
  
  **Explanation:** The buffer manager (BM) subcomponent of DB2 discovered an inconsistent page with unbalanced write intents. DB2 is ready to do online recovery on the page using the DB2 log. The `dbn` indicates the associated database name. The `spn` indicates the table space name or index space name. The `pno` is the page number (in hexadecimal) within the table space or index space that is logically inconsistent.

  **System Action:** Processing continues.

- **DSNB215I** `csect-name–ONLINE RECOVERY FOR AN INCONSISTENT PAGE HAS BEEN COMPLETED FOR DBNAME = dbn , SPACENAME = spn , PAGE NUMBER = X'pno` 
  
  **Explanation:** The recovery process for an inconsistent page completed. The `dbn` indicates the associated database name. The `spn` indicates the table space name or index space name. The `pno` is the page number (in hexadecimal) within the table space or index space that was logically inconsistent.

  **System Action:** Processing continues.

- **DSNB217I** `csect-name–ONLINE RECOVERY FOR AN INCONSISTENT PAGE WAS UNSUCCESSFUL FOR DBNAME = dbn , SPACENAME = spn , PAGE NUMBER = X'pno` 
  
  **Explanation:** The recovery process for an inconsistent page failed. The page is written to DASD as logically inconsistent. This message is issued in response to message DSNB212I, which was issued to indicate the start of the recovery process. The `dbn` indicates the associated database name. The `spn` indicates the table space name or index space name. The `pno` is the page number (in hexadecimal) within the table space or index space that was logically inconsistent.

  **System Action:** The page is marked as logically inconsistent and is unavailable until it is repaired. The execution unit driving this function proceeds normally.

  **Problem Determination:** A DSN012I message might be issued before this message to indicate the same failure. If it is, a 00C90102 abend dump might help determine the cause of this failure. Otherwise, see SYS1.LOGREC for any abend that occurred between the associated DSNB212I message and this message. Use the time stamp on the log records to find this abend.

**User Response:**

**System Action:** Processing continues.

**Explanation:**

- **DSNB219I csect-name–BUFFER MANAGER TABLESPACE/INDEXSPACE CLEAN–UP PROCESS HAS BEEN COMPLETED FOR DBNAME = dbn , SPACENAME = spn**

  **Explanation:** This message indicates that the buffer manager (BM) table space or index space cleanup process completed for the associated table space or index space. Refer to message DSNB209I for the reasons why the buffer manager schedules the table space or index space cleanup process. The `dbn` indicates the associated database name. The `spn` indicates the table space name or index space name.

  **System Action:** Processing continues.

**Explanation:**

- **DSNB221I csect-name–BUFFER MANAGER TABLESPACE/INDEXSPACE CLEAN–UP PROCESS WAS NOT REQUIRED FOR PSID = X’psid’**

  **Explanation:** This message indicates that the buffer manager (BM) table space or index space cleanup process was bypassed for the associated table space or index space. After quiescing all other activities against the table space or index space, the buffer manager discovered that the table space or index space is no longer in active mode; that is, it was closed. The abnormal condition detected earlier was resolved by buffer manager close page set processing. Refer to the corresponding message, DSNB209I, using `psid` as the matching field, for the reasons the buffer manager schedules the table space or index space cleanup process. The `psid` is the internal identifier for the associated table space or index space.

  **System Action:** Processing continues.

**Explanation:**

- **DSNB223I csect-name–BUFFER MANAGER TABLESPACE/INDEXSPACE CLEANUP PROCESS WAS SKIPPED FOR PSID = X’psid’**

  **Explanation:** This message indicates that the table space or index space cleanup process was bypassed for the associated table space or index space. During the process of quiescing all other activities against the table space or index space, an error that is not recoverable was detected. The error might be caused by any of the following conditions:

  - An out-of-storage condition was detected by IRLM.
  - The table space or index space was dropped because of a backout.

  It is assumed that the abnormal condition detected earlier can later be resolved by the close page set processing. Refer to the corresponding message DSNB209I (use `psid` as the matching field) for the reasons for scheduling the table space or index space cleanup process. The `psid` specifies the internal identifier for the associated table space or index space.

  **System Action:** Processing continues.

**System Programmer Response:** The associated table space or index space might contain inconsistent data. Issue the DB2 STOP TABLESPACE or INDEXSPACE command to allow close page set processing to perform cleanup for the associated table space or index space.
DSNB224I csect-name - BUFFER MANAGER I/O ERROR DURING function, DBNAME=dnb, SPACENAME=snm, DATA SET NUMBER=dsn, PAGE NUMBER=X’pno’, MM ERROR FLAG=X’aa’, CSW STATUS=X’bbbb’, SENSE BYTES=X’cccc’, SEEK ADDRESS=X’ddddddeeeeee’

Explanation: An I/O error was encountered by the buffer manager (BM) subcomponent of DB2. The function specified in the message is READ, WRITE, or FORMAT. The message gives the database name, table space name or index space name, data set number, and page number (in hexadecimal) of the page for which the I/O operation was being performed. The remaining information is error information returned by the media manager and is used for error analysis by IBM support personnel.

System Action: The system action depends on the function being performed. If the function is WRITE, or if the function is READ and the operation was performed during restart or rollback, the I/O error page range of the data set is updated and message DSNU086I is issued. In most cases (READ, synchronous WRITE, FORMAT), a ‘resource not available’ is returned to the user with a reason code that identifies the nature of the problem.

After being issued 10 times for a given data set, this message is disabled for that data set until it is closed and reopened.

Operator Response: Notify the system programmer.

System Programmer Response: See documentation in "Section 4. DB2 Codes" on page 577 for the reason code returned to the user in the SQLCA or in utility messages. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: See the Problem Determination section of the reason code returned to user.

Check the MVS console log for an IOS error message indicating the type of I/O error that occurred. If an IOS message was issued, follow the problem determination directions for that message.

Collect the following diagnostic items listed in Appendix B.

Problem determination on page 1051: 1, 2, 5, 10, 12.

---

DSNB225I csect-name - BUFFER MANAGER I/O ERROR DURING function DBNAME=dnb, SPACENAME=snm, DATA SET NUMBER=dsn, MM ERROR CODES=X’aaaaaaa’, DB2 REASON CODE=X’bbbbbbb’

Explanation: DB2 encountered an I/O error. The function specified in the message is READ, WRITE, CASTOUT, or FORMAT. The message contains the database name, table space name or index space name, data set number, media manager error information returned at the time of the failure, and the DB2 reason code associated with this failure.

System Action: Except for a castout error, the application terminates with abend X’04E’ and reason code 00C200A4 or 00C200C0. If an error occurs during castout, processing continues.

Operator Response: Notify the system programmer and follow the directions given for the reason code described in "Section 4. DB2 Codes" on page 577.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: This message is issued before the occurrence of abend X’04E’ and reason code 00C200A4 or 00C200C0 to provide information related to the media manager failure.

Check the MVS console log for an IOS error message indicating the type of I/O error that occurred. If an IOS message was issued, follow the problem determination directions for that message.

Collect the following diagnostic items listed in Appendix B.

Problem determination on page 1051: 1, 2, 5, 10, 12, 64.

---

DSNB226I csect-name - BUFFER MANAGER PAGE GET ROUTINE DETECTED AN INVALID PAGE IN DBNAME=dnb, SPACENAME=snm, DATA SET NUMBER=dsn, PAGE EXPECTED=X’aaaaaaa’, PAGE RECEIVED=X’bbbbbbb’

Explanation: An unexpected page was received during buffer manager (BM) get page processing. The page set involved is identified by the database name, space name, and data set number. The page in error is identified by page expected aaaaaa. Page number bbbbbbb was found in the buffer that should contain the expected page.

System Action: The application is terminated with abend X’04E’ and reason code 00C200F7.

Operator Response: Notify the system programmer and follow the directions given for reason code 00C200F7 in "Section 4. DB2 Codes" on page 577.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: This message is issued before the occurrence of abend X’04E’ and reason code 00C200F7 to provide information about the page set involved.

Collect the following diagnostic items listed in Appendix B.

Problem determination on page 1051: 1, 2, 5, 10, 12, 64.

---

DSNB227I csect-name - DFHSM RECALL FAILED FOR DSNAME=dsn HSMRC=aaaaaaaa HSMRNS=bbbbbbbb

Explanation: The attempt to recall a migrated data set failed. DSNAME identifies the data set. HSMRC and HSMRNS are the return code and reason code given by DFHSM.

System Action: A ‘resource not available’ code is returned to the user.

Operator Response: Notify the system programmer.

System Programmer Response: Use the information provided in the message to determine the reason for the DFHSM recall failure.

Problem Determination: Refer to "Section 4. DB2 Codes" on page 577 for an explanation of the return and reason codes contained in this message. Refer to the DFHSM message ARC11nnI, where nn is the value of HSMRC.
Explanation: While accessing group buffer pool gbpname for function function DB2 received an error from the MVS IXLCACHE request.

**System Action:** The system action depends on the function being performed. If the function is a WRITE, or a READ performed during rollback or DB2 restart, the page is added to the logical page list (LPL) for the data set and message DSNB250E is issued. Otherwise, 'resource unavailable' is returned to the user with a reason code that identifies the specific problem.

**System Programmer Response:** See MVS/ESA Programming: Sysplex Services Reference for an explanation of the MVS IXLCACHE reason code.

---

**Explanation:** DB2 received an unexpected error from MVS when checking for the completion of a write request to the secondary group buffer pool for duplexing. gbpname indicates the name of the group buffer pool. If the group buffer pool is duplexed and the error was encountered on a request to the secondary group buffer pool, then gbpname indicates the name of the group buffer pool suffixed with '-SEC'.

**System Programmer Response:** See MVS/ESA Programming: Sysplex Services Reference for an explanation of the MVS IXLFCOMP reason code.

---

**Explanation:** A required inter-system sharing data set of a DB2 table space could not be opened. DB2 encountered an unexpected data set level ID.

**System Programmer Response:** To enable access to a data set reported as down level, take one of the following actions:

- **Restore the page set or partition to a prior point in time with DSN1COPY, DFHSM, or another tool.**
- **Identify the level ID of a copy of the page set or partition by running the DSN1PRNT (FORMAT) utility.** The level ID is found in the header page of the page set or partition.
- **Recover the down level page set or partition to currency by running the RECOVER or RECOVER LOGONLY utility.**
- **Accept the down levelling by running the REPAIR utility with the LEVELID option.**
- **Explicitly restore the page set to a prior point in time with the RECOVER utility.**

Inconsistent data problems might result from this action and are the user's responsibility.

- **Replace the contents of the page set or partition using the LOAD REPLACE utility.**
- **Explicitly restore the page set to a prior point in time with the RECOVER utility.**

If the expected level ID is less than the encountered level ID, it is possible that the object identified in the message was ported from another system improperly or it might indicate that DSNDB01.SYSLGRNX is down level. If the problem is in the object identified in the message, the actions listed above can be used to allow access to the data. If the problem is in SYSLGRNX, this is a serious situation that compromises the recoverability of all objects managed by DB2. Investigate whether SYSLGRNX might have inadvertently been restored to a point in time inconsistent with the rest of the DB2 system.

**System Programmer Response:** Notify the system programmer.
**DSNB250E**  csect-name A PAGE RANGE WAS ADDED TO THE LOGICAL PAGE LIST DATABASE NAME = dbn SPACE NAME = spn DATA SET NUMBER = dsn0 PAGE RANGE = lowpg TO highpg START LRSN = startlrsn END LRSN = endlrsn START RBA = startrba

**Explanation:** DB2 added a page range to the logical page list (LPL) for the specified data set because of a problem with the pages in the page range. The startlrsn and endlrsn give the log range needed to recover the pages in the page range. These values are RBA values unless DB2 is in the data sharing environment, in which case these values are LRSN values. In the data sharing environment, starttrba indicates the starting RBA value of the recovery log range if the value is not zero. The starttrba only applies to log records for the DB2 member that issued the message. The zero value for endtrba or endlrsn in this message refers to the current end of the recovery log.

**System Action:** The page range is added to the LPL for the page set. The page remains inaccessible until it is recovered with either the START DATABASE command with the SPACENAM option, the RECOVER utility, or the LOAD utility. Users attempting to access a page in the LPL receive SQLCODE -904 with reason code 00C20206. If MVS detects a problem during group buffer pool access processing, DB2 writes a SYS1.LOGREC entry describing the error.

**System Programmer Response:** To recover pages from the LPL, use the -START DATABASE command with the SPACENAM option, the RECOVER utility, or the LOAD utility.

---

**DSNB301E**  csect-name GROUP BUFFER POOL gpbname CANNOT BE CONNECTED DB2 REASON CODE = reason1 MVS IXLCONN REASON CODE = reason2

**Explanation:** DB2 was not able to connect to the named group buffer pool. This message is generally issued once for each DB2 subsystem for each DB2 reason code, except 00C20204, until the failure condition is corrected.

```
reason1  DB2 reason code
reason2  MVS IXLCONN reason code
```

For DB2 reason code 00C20204, which indicates a problem during MVS IXLCONN processing, this message is issued once for each DB2 subsystem for each IXLCONN reason code until the failure condition is corrected. If the DB2 reason code is not 00C20204, then reason2 contains zeros. See MVS/ESA Programming: Sysplex Services Reference for an explanation of MVS IXLxxxx reason codes.

**System Action:** If the connection was requested on behalf of an access request by an SQL user on this DB2, SQLCODE -904 (resource unavailable) is returned to the SQL user with the DB2 reason code shown in this message.

If the connection was requested on behalf of an SQL user on another DB2 in the data sharing group, SQLCODE -904 (resource unavailable) is returned to the SQL user with DB2 reason code 00C20252. This indicates that the requested table space or index space is unavailable because another DB2 cannot connect to the group buffer pool.

If the MVS IXLCONN reason code is xxxx0C08 (structure allocation failed because there was no suitable facility to allocate based on the preference list in the MVS CFM administrative policy), or if the MVS IXLCONN reason code is xxxx0B4C (user does not have proper Security Access Facility (SAF) authorization), then IFCID 0250, if active, contains additional diagnostic information.

---

**DSNB302I**  csect-name GROUP BUFFER POOL gpbname IS ALLOCATED IN A VOLATILE STRUCTURE

**Explanation:** The DB2 group buffer pool structure is volatile.

One DB2 member issues this message whenever the structure has the volatile attribute. DB2 detects this either on the first connection to the group buffer pool or when the attribute changes later. DB2 always requests nonvolatile group buffer pools but allows allocation in a volatile structure if that is all that is available.

**System Action:** DB2 processing continues.

**System Programmer Response:** To cause the group buffer pools to be allocated in nonvolatile coupling facilities, ensure that:

- At least a subset of your coupling facilities are configured correctly for nonvolatility.
- The MVS CFM policy correctly specifies the nonvolatile coupling facilities in the preference list for the group buffer pool coupling facility structures.

Even when these things are correctly done, there might be instances when a suitable coupling facility in the preference list cannot be found (for example, not enough free space), and therefore allocation occurs in a different coupling facility. MVS tries to allocate the structure in the facility that best meets the structure allocation request as follows:

1st choice: Coupling facility that meets the volatility requirement, the space requirement, and the exclusion list requirement.

2nd choice: Coupling facility that meets the volatility requirement and the storage requirement.

3rd choice: Coupling facility that has the best fit (most available free space) even though this might be less than the amount requested.

4th choice: Structure cannot be allocated.

IFCID 0250, if activated, contains a list of the coupling facilities on which allocation was attempted.

---

**DSNB303E**  csect-name A LOSS OF CONNECTIVITY WAS DETECTED TO GROUP BUFFER POOL gpbname

**Explanation:** Connectivity to group buffer pool gpbname was lost.

**System Action:** DB2 disconnects from the coupling facility structure with REASON=FAILURE.

The action taken in response to this problem depends on the attempted function, as follows:

- For a coupling facility read: SQLCODE -904 (resource unavailable) is returned to the SQL user with a reason code indicating the specific error.
- For a coupling facility read during rollback, backout, or restart: The inaccessible page is added to the logical page list (LPL) for the page set. Message DSNB250E is issued for the first page of each data set added to the LPL.
- For a coupling facility read during castout: The castout operation cannot complete.
For a coupling facility write: The changed page is added to the LPL for the page set.

**DSNB304I**

```
csect-name GROUP BUFFER POOL gbpname WAS SET TO 'DAMAGE ASSESSMENT PENDING' STATUS
```

**Explanation:** A coupling facility structure for a group buffer pool was damaged.

**System Action:**
- DB2 puts the group buffer pool into 'damage assessment pending' (DAP) status. Message DSNB304I indicates the DAP status. The group buffer pool cannot be accessed until DAP status is cleared.
- The DB2 damage assessment process determines which table spaces and index spaces are using the failed group buffer pool and puts those spaces into 'group buffer pool recovery pending' (GRECP) status.
- After DB2 sets all the necessary spaces to GRECP status, the DAP status for the group buffer pool is cleared. Message DSNB305I indicates that DAP status is cleared.

**DSNB305I**

```
csect-name 'DAMAGE ASSESSMENT PENDING' STATUS WAS CLEARED FOR GROUP BUFFER POOL gbpname
```

**Explanation:** Damage assessment completed and the 'damage assessment pending' (DAP) status is cleared for the group buffer pool (GBP). At this point, the group buffer pool status is no longer restricted and DB2 attempts to reconnect to the group buffer pool on the next reference to a GBP-dependent page set within the associated buffer pool.

Message DSNB304I precedes this message.

**DSNB306I**

```
csect-name THE REQUESTED LENGTH OF THE LOCAL CACHE VECTOR COULD NOT BE ALLOCATED FOR GROUP BUFFER POOL gbpname REQUESTED LENGTH = length1 ALLOCATED LENGTH = length2
```

**Explanation:** DB2 connected to the group buffer pool indicated by `gbpname`, but the MVS Cross-system Extended Services (XES) component could not allocate the requested size of the local cache vector (LCV) in the hardware system area (HSA). DB2 requires an LCV size that is large enough to handle all pages in the member's buffer pool (virtual pool and hiperpool combined).

`length1` indicates the LCV size (in number of bits) that DB2 requested. `length2` indicates the LCV size (in number of bits) that XES was able to allocate.

To prevent flooding the operator console, this message is only issued once per DB2 member per group buffer pool until the condition is corrected.

**System Action:** DB2 disconnects from the GBP and issues message DSNB301E with reason code 00C20208, if it has not yet been issued.

SQLCODE -904 is returned to the user with a reason code of 00C20208.

**System Programmer Response:** There is not enough HSA storage on the processor to support the size of the local cache vector. The details of HSA allocation are machine-dependent and are defined by the hardware. To correct this problem, take one or both of the following actions:

- Consult the documentation for your processor hardware to determine if the HSA storage allocation can be increased, and if so, how to do it.
- Modify the software configuration in your parallel sysplex to reduce the number or size of the vectors that are in use by other coupling facility structure users. Consider the following possible solutions:
  - Use the DB2 ALTER BUFFERPOOL command to reduce the size of this local buffer pool. This means you might have to reduce or eliminate the hiperpool or reduce the size of the virtual pool.
  - Use the DB2 ALTER BUFFERPOOL command to reduce the size of another local buffer pool that is already connected to a group buffer pool. This means that you might have to reduce or eliminate the hiperpool, or reduce the size of the virtual pool. If you make a connected buffer pool smaller, DB2 can usually contract the size of the corresponding LCV dynamically, making HSA storage available. However, DB2 cannot always do the dynamic LCV contraction; this is especially true if there is a hiperpool. In cases where DB2 cannot dynamically contract the LCV size, you can use the DB2 ALTER BUFFERPOOL command to either force a deallocation of the LCV or to force a contraction of the LCV as follows:
    1. Delete the hiperpool, if it exists.
    2. Take one of the following actions:
       a. Make the virtual pool very small (perhaps 50 pages or less). Making the virtual pool sufficiently small should let DB2 dynamically contract the LCV, or
       b. Delete the virtual pool to let DB2 disconnect from the group buffer pool. This frees the entire LCV associated with that member's connection to that group buffer pool.
    3. Redefine the virtual pool to be smaller than the original size. If a hiperpool originally existed, then you can probably restore the virtual pool back to its original size.
       - Consolidate your group buffer pool-dependent page sets into fewer buffer pools to reduce the number of group buffer pool connections.
       - Consult the documentation for the other software components that might be using a coupling facility cache or list structure with an associated LCV to determine whether it is possible to either delete the connection or to reduce the size of the LCV associated with the connection.

**DSNB307I**

```
csect-name GROUP BUFFER POOL gbpname WAS SUCCESSFULLY ALLOCATED BUT THE EXCLUSION LIST WAS NOT HONORED
```

**Explanation:** DB2 successfully connected to the group buffer pool and allocated the group buffer pool in a coupling facility. However, the group buffer pool was allocated in a coupling facility containing a structure in the exclusion list.

**System Programmer Response:** If you require that the exclusion list be honored, you must ensure that there is sufficient space in the coupling facilities that are not in the exclusion list. IFCID 0250 provides information about which facilities were attempted.
DSNB308I  csect-name GROUP BUFFER POOL  gbpname

Was successfully allocated but the allocated size of alloc_size is less than the requested size of req_size

Explanation:  DB2 successfully connected to the group buffer pool and allocated the group buffer pool in a coupling facility. However, the allocated size of the group buffer pool was less than the requested size in the MVS CFM administrative policy because there is not enough space in the preference list facilities. Both alloc_size and req_size are in 4KB blocks.

System Programmer Response:  IFCID 0250 provides information about which coupling facilities were used for attempted allocation.

DSNB309I  csect-name GROUP BUFFER POOL  gbpname

Has been disconnected with a reason of 'reason'

Explanation:  DB2 disconnected from the named group buffer pool.

reason indicates one of the following values:

NORMAL  DB2 disconnected the group buffer pool normally. MVS deletes the connection.

FAILURE  DB2 disconnected the group buffer pool abnormally. MVS puts the connection into a 'failed-persistent' state. DB2 disconnects the GBP with a reason of FAILURE when some type of error has been detected, and castout processing cannot proceed. Usually the error involves a connectivity failure to either the coupling facility or DASD. This message is preceded by message DSNB303E, and probably a series of DSNB311I and DSNB312I messages.

If this message is issued because connectivity was lost to the group buffer pool, this message signifies that this DB2 member has completed its processing of the error.

System Programmer Response:  See the system programmer response for message DSNB311I or DSNB312I.

DSNB310I  csect-name GROUP BUFFER POOL  gbpname

Is allocated in a nonvolatile structure

Explanation:  The coupling facility storage in which the group buffer pool is allocated was previously volatile, but is now non-volatile. For availability reasons, we recommend that DB2 group buffer pools be allocated in nonvolatile coupling facility storage. When DB2 connects a group buffer pool, it requests that the backing coupling facility structure be allocated in non-volatile storage. If the request for nonvolatile storage is not honored, DB2 issues message DSNB302I.

System Action:  DB2 processing continues.

DSNB311I  csect-name DBNAME  database SPACE NAME

spacename HAS PAGES IN THE LOGICAL PAGE LIST

Explanation:  This message is issued after a loss of connectivity to a group buffer pool was detected. The message indicates that the named table space or index space has one or more pages in the logical page list (LPL) that need to be recovered. This message is issued after DB2 has completed its processing for the table space or index space; this is the earliest point at which you can recover LPL pages for that table space or index.

System Action:  The pages in the LPL are not accessible until they have been recovered.

System Programmer Response:  Issue the START DATABASE command with the named table space or index to recover the LPL pages. The START DATABASE command must be issued from a DB2 member that can connect to the group buffer pool. Alternatively, the RECOVER utility or the LOAD utility can be used to recover the LPL pages.

DSNB312I  csect-name DBNAME  database SPACE NAME

spacename PARTITION  part-number HAS PAGES IN THE LOGICAL PAGE LIST

Explanation:  This message is issued after a loss of connectivity to a group buffer pool was detected. The message indicates that a partition of the named table space or index has one or more pages in the logical page list (LPL) that need to be recovered. This message is issued after DB2 has completed its processing for the partition; this is the earliest point at which you can recover the LPL pages for that partition.

System Action:  The pages in the LPL are not accessible until they have been recovered.

System Programmer Response:  Issue the START DATABASE command on the table space or index space partition to recover the LPL pages. The START DATABASE command must be issued from a DB2 member that can connect to the group buffer pool. Alternatively, the RECOVER utility or the LOAD utility can be used to recover the LPL pages.

DSNB313I  csect-name GROUP BUFFER POOL  gbpname

Is to be disconnected reason=reason  lossconn percentage=percentage

Explanation:  This DB2 member is disconnecting from group buffer pool gbpname because it has lost connectivity to the coupling facility in which the group buffer pool is allocated.

reason is one of the following:

NOSFMPOL  MVS cannot determine the scope of the loss of connectivity because there is no active SFM policy with CONNFIL(YES).

LOSSCONN  MVS determined that the scope of the loss of connectivity was less than 100%.

NOXESEVL  MVS started to try to determine the scope of the loss of connectivity, but some condition occurred which prevented MVS from being able to complete the evaluation. One example of such a condition would be that the SFM policy became inactive while MVS was trying to do the evaluation.

If reason is LOSSCONN, then percentage indicates the percentage of lost connectivity that was calculated by MVS. MVS
evaluates the scope of the loss of connectivity in terms of SFM weights associated with the systems which have lost connectivity and which have active connectors to the coupling facility structure (if there are systems that do not have an active connector to the coupling facility structure, then those systems are not factored into the "percentage loss of connectivity" calculation).

If reason is not LOSSCONN, then percentage is not applicable (it should appear as zero).

**System Action:** The DB2 member disconnects the group buffer pool, putting its connection into a "failed-persistent" state.

If there are transactions that are in progress at the time of the connectivity failure, DB2 might need to add pages to the logical page list (LPL).

**System Programmer Response:** Use the START DBASE command to recover the LPL pages. If DSNDDB01 or DSNDDB06 objects have LPL pages, you might need to recover these first, before proceeding with LPL recovery for other objects.

**DSNB314I**

`csect-name DAMAGE ASSESSMENT TO BE TRIGGERED FOR GROUP BUFFER POOL gpbname REASON=reason`

**Explanation:** DB2 is about to initiate the damage assessment function for group buffer pool gpbname because of a detected error in either the coupling facility in which the group buffer pool was allocated, or in the connectivity from the MVS systems to the coupling facility.

reason is one of the following:

- **100%LCON** An error has occurred in a coupling facility or in the attachments of MVS systems to a coupling facility which has caused all DB2 members to lose connectivity to the named group buffer pool.

- **STRFAIL** There was an error in the coupling facility in which the group buffer pool was allocated which caused a failure of the coupling facility structure.

- **CONERROR** The named group buffer pool is currently allocated in a coupling facility, but DB2 cannot connect to the group buffer pool because the system on which it is running does not currently have connectivity, and MVS has indicated that currently no other member is actively connected and has connectivity.

- **DAP** The named group buffer pool is in damage assessment pending (DAP) state.

**System Action:** DB2 triggers the damage assessment function to ensure that any changed pages that might have been cached in the affected group buffer pool get marked as "needing recovery" (the objects to which the pages belong are marked in GRECP state). This message should be immediately followed by a DSNB304I message indicating that the group buffer pool has been entered into damage assessment pending (DAP) state.

If there are transactions that are in progress at the time of the connectivity failure, DB2 might need to add pages to the logical page list (LPL).

There is one case where DB2 triggers damage assessment for a group buffer pool, but no DSNB314I message is issued. This case is where the group buffer pool was manually deleted (via MVS SETXCF FORCE commands) while all connections to the group buffer pool were failed-persistent (e.g. all DB2 members were down). In this case, the next DB2 member to connect to the group buffer pool will cause MVS to try to reallocate a new instance of the group buffer pool in some coupling facility in the CFRM policy preference list. If the allocation succeeds, then DB2, by doing a coupling facility structure version id comparison, will detect that the previous instance of the group buffer pool had been lost, and will trigger damage assessment. But you will not receive the DSNB314I message in this case, nor will you receive the DSNB304I or DSNB305I messages indicating that the group buffer pool has been put into damage assessment pending (DAP) state. You will only receive a series of DSNB322I and/or DSNB323I messages indicating those pagesets or partitions that have been put into GRECP state by the damage assessment process.

**System Programmer Response:** Use the START DBASE command to recover the LPL pages and GRECP objects. If DSNDDB01 or DSNDDB06 objects are in GRECP state or have LPL pages, you might need to recover these first, before proceeding with GRECP or LPL recovery for other objects.

**DSNB315I**

`csect-name GROUP BUFFER POOL gpbname IS ALLOCATED AS GBPCACHE cacheatt`

**Explanation:**

- **YES** The group buffer pool will be used for data caching.
- **NO** The group buffer pool will not be used for data caching. It will be used for cross invalidation only.

One DB2 member issues this message whenever the structure is allocated. DB2 detects this on the first connection to the group buffer pool either in the mainline processing or during group buffer pool rebuild.

**System Action:** DB2 processing continues.

**DSNB319A**

`csect-name THERE IS A SHORTAGE OF SPACE IN GROUP BUFFER POOL gpb-name`

**Explanation:** The amount of storage in the group buffer pool (GBP) coupling facility structure available for writing new pages is low. The GBP is 75 percent full with changed data. As the GBP fills with changed data, the castout thresholds are continuously reached, and the castout engines must continuously work to attempt to keep the number of changed pages in the GBP below the castout thresholds. Also, the more changed data the GBP contains, the less efficiently it operates. Completely running out of GBP storage can result in transaction delays and in pages being added to the logical page list (LPL). This message stays on the MVS console and is highlighted.

**System Action:** DB2 processing continues.

This message might remain highlighted and might not be automatically deleted in a pre SP5.2.1-JES3 environment.

**Operator Response:** Contact the system programmer to fix the storage problem.

**System Programmer Response:**

You can relieve the GBP storage shortage by taking one or more of the following actions:
• Use the ALTER GROUPBUFFERPOOL command to lower the CLASST and GBPOLT castout thresholds.
• Use the ALTER GROUPBUFFERPOOL command to lower the GBPCHKPT GBP checkpoint frequency.
• Use the MVS SETXCF START,REBUILD command to expand the GBP coupling facility structure. If you rebuild, you can use the ALTER GROUPBUFFERPOOL command to lower the RATIO so that a higher percentage of the GBP storage is given to data entries over directory entries.
• If you are running on MVS 5.2 or a subsequent release, you can use the MVS SETXCF START,ALTER command to expand the size of the GBP (the maximum size to which you can expand is determined by the SIZE parameter in the CFRM policy that was used to allocate the GBP).

If you don't do anything to relieve the storage shortage, message DSNB325A appears if the GBP reaches 90 percent full.
Message DSNB3271 appears when the GBP storage shortage is relieved.
You can monitor the amount of GBP storage in use with the DISPLAY GBPPOOL command and with the DB2 statistics trace. Monitor the castout activity to ensure that castouts are keeping up with the rate of GBP-write activity. You can use Performance trace classes 20 and 21 (specifically, IFICDs 0261, 0262 and 0263) to do more detailed monitoring of the DB2 castout processing.

**DSNB320I**  
csect-name - DBNAME database SPACE NAME  
spacename PARTITION part-number IN GROUP  
BUFFERPOOL gbpname IS IN GROUP  
BUFFERPOOL RECOVERY PENDING STATE

Explanation: This message reports the group buffer pool recovery pending (GRECP) status of the named table space or index space partition.  
Severity: 4 (warning)  
System Action: The data in the identified partition is not accessible.  
User Response: Issue the -START DATABASE command on the partition to remove the GRECP status and make the data accessible again. You can also use the RECOVER or LOAD utility with the REPLACE option to clear the GRECP status.

**DSNB321I**  
csect-name - DBNAME database SPACE NAME  
spacename IN GROUP BUFFERPOOL gbpname  
IS IN GROUP BUFFERPOOL RECOVERY PENDING STATE

Explanation: This message reports the group buffer pool recovery pending (GRECP) status of the named table space or index space.  
Severity: 4 (warning)  
System Action: The table space or index space is not accessible.  
User Response: Issue the -START DATABASE command on the table space or index space to remove the GRECP status and make the data accessible. You can also use the RECOVER or LOAD utility with the REPLACE option to clear the GRECP status.

**DSNB322I**  
csect-name - TABLE SPACE OR INDEX SPACE  
WITH DBID 'dbid' PSID 'psid' PARTITION  
part-number IN GROUP BUFFERPOOL  
gbpname IS IN GROUP BUFFERPOOL  
RECOVERY PENDING STATE AND CANNOT  
BE AUTOMATICALLY RECOVERED

Explanation: This message reports the group buffer pool recovery pending (GRECP) status of the table space or index space partition identified by the internal identifiers DBID and PSID. This message is issued instead of message DSNB322I when the name of the table space or index space is not available. The partition cannot be automatically recovered because there are retained physical locks (P-locks) on the partition.  
Severity: 4 (warning)  
System Action: The data in the identified partition is not accessible.  
User Response: Issue the -DISPLAY DATABASE(*) SPACENAM(*) RESTRICT command to determine the table spaces or index spaces partition in GRECP status. First, start the failed DB2 members that hold retained P-locks on the partition.Issue the -START DATABASE command on the partition to remove the GRECP status and make the data accessible again. You can also use the RECOVER or LOAD utility with the REPLACE option to clear the GRECP status.

**DSNB323I**  
csect-name - TABLE SPACE OR INDEX SPACE  
WITH DBID 'dbid' PSID 'psid' IN GROUP  
BUFFERPOOL gbpname IS IN GROUP  
BUFFERPOOL RECOVERY PENDING STATE  
AND CANNOT BE AUTOMATICALLY RECOVERED

Explanation: This message reports the group buffer pool recovery pending (GRECP) status of the table space or index space identified by the internal identifiers DBID and PSID. This message is issued instead of message DSNB321I when the name of the table space or index space is not available. The table space or index space cannot be automatically recovered because there are retained physical locks (P-locks) on the space.  
Severity: 4 (warning)  
System Action: The table space or index space is not accessible.  
User Response: Issue the -DISPLAY DATABASE(*) SPACENAM(*) RESTRICT command to determine the table spaces or index spaces in GRECP status. First, start the failed DB2 members that hold retained P-locks on the table space or index space. Issue the -START DATABASE command on the table space or index space to remove the GRECP status and make the data accessible again. You can also use the RECOVER or LOAD utility with the REPLACE option to clear the GRECP status.

**DSNB325A**  
csect-name THERE IS A CRITICAL SHORTAGE  
OF SPACE IN GROUP BUFFER POOL gbpname

Explanation: The amount of storage in the group buffer pool (GBP) coupling facility structure available for writing new pages is critically low. The GBP is 90 percent full with changed data. As the GBP fills with changed data, the castout thresholds are continuously reached, and the castout engines must continuously work to attempt to keep the number of changed pages in the GBP below the castout thresholds. In addition, the more
the GBP is filled with changed data, the less efficient are the
coupling facility storage management algorithms. Completely
running out of GBP storage can result in transaction delays
and in pages being added to the logical page list (LPL).

This message stays on the MVS console and is highlighted.

System Action: DB2 processing continues.

This message might remain highlighted and might not be auto-
dmatically deleted in a pre-SP5.2.1-JES3 environment.

Operator Response:  Contact the system programmer to fix
the storage problem.

System Programmer Response: You can relieve the GBP
storage shortage by taking one or more of the following
actions:

- Use the ALTER GROUPBUFFERPOOL command to lower the
  CLASST and GBPOOL castout thresholds.
- Use the ALTER GROUPBUFFERPOOL command to lower the
  GBPCHKPT GBP checkpoint frequency.
- Use the MVS SETXCF START,REBUILD command to expand the GBP
coupling facility structure. If you rebuild, you can use the ALTER GROUPBUFFERPOOL command to lower the RATIO so that a higher percentage of the GBP storage is given to data entries over directory entries.
- If you are running on MVS 5.2 or a subsequent release,
you can use the MVS SETXCF START,ALTER command to lower the
gbpcapacity parameter of the MVS CFRM policy that was used to allocate the GBP.

If you don't do anything to relieve the storage shortage,
message DSNB228I appears if a write to the GBP fails due to a
'GBP full' condition. If DB2 detects a 'full' condition, it will 
suspend the transaction, initiate castout activity, and then retry the write to the GBP. If the GBP write still fails after several retry attempts, then DB2 adds the page to LPL.

Message DSNB327I appears when the GBP storage shortage is relieved.
You can monitor the amount of GBP storage in use with the
DISPLAY GBPOOL command and with the DB2 statistics
trace. Monitor the castout activity to ensure that castouts are keeping up with the rate of GBP-write activity. You can use Performance trace classes 20 and 21 (specifically, IFCIDs 0261, 0262 and 0263) to do more detailed monitoring of the
DB2 castout processing.

# DSNB330I csect-name GROUP BUFFER POOL gbpname
CANNOT BE CONNECTED FOR REBUILD
DB2 REASON CODE = reason1 MVS IXLCONN
REASON CODE = reason2

Explanation: DB2 was not able to connect to the named
group buffer pool for rebuild. reason1 is the DB2 reason code.
reason2 is the MVS IXLCONN reason code. See MVS/ESA
Programming: Sysplex Services Reference for an explanation
of MVS IXLxxxx reason codes.

System Action: DB2 stops the rebuild.

Problem Determination: If the MVS IXLCONN reason code
is xxxx0C08 (structure allocation failed because there was no
suitable facility to allocate based on the preference list in the
MVS CFRM administrative policy), or if the MVS IXLCONN
reason code is xxxx040C (user does not have proper Security
Access Facility (SAF) authorization), then IFCID 0250, if active,
contains additional diagnostic information.

# DSNB331I csect-name REBUILD STARTED FOR GROUP
BUFFER POOL gbpname REASON = reason

Explanation: A rebuild has been initiated for the named
group buffer pool. reason indicates the reason why the rebuild
was initiated. reason can be one of the following:

OPERATOR The operator initiated a SETXCF command to
initiate the rebuild.

LOSSCONN MVS detected a loss of connectivity to the
group buffer pool.

This message is issued by each DB2 member participating in the
rebuild.

System Action: The DB2 members that are actively con-
ected to the named group buffer pool participate in the
rebuild. DB2 accomplishes the group buffer pool rebuild
process in two phases:

1. Quiesce phase. Each member quiesces all local access to
the group buffer pool.

2. Connect phase. Each member connects to the new struc-
ture. Each page set or partition castout owner that has
connectivity to original structure is responsible for writing
pages from the original structure to the new one. If there
are not enough data entries in the new structure, the page
set and partition owners cast those pages out to DASD
instead. Each member issues message DSNB332I after it
completes this activity. After all members have completed
their castout owner rebuild work, the group buffer pool
structure owner does the final sweep and checks to see if
there are any changed pages still remaining in the original
structure. If so, the structure owner reader reads the changed
pages from the original structure and writes them to the
new one. The structure owner issues message DSNB333I after
it has completed the final sweep.

After all members have responded to MVS indicating that its
connect phase processing is complete, MVS then notifies each
member that the rebuild is complete. Each DB2 member
issues message DSNB338I indicating that the rebuild has com-
pleted successfully.

If an error occurs during the rebuild, the rebuild is stopped.
Each DB2 member issues message DSNB335I indicating the
reason why the rebuild is stopping, followed by message
DSNB339I indicating that the rebuild has not completed suc-
cessfully. The operator can also stop rebuilds using the MVS
SETXCF command.
**DSNB332I**  
`csect-name THIS MEMBER HAS COMPLETED CASTOUT OWNER REBUILD FOR GROUP BUFFER POOL gbpname PAGES CAST OUT FROM ORIGINAL STRUCTURE = value1 PAGES WRITTEN TO NEW STRUCTURE = value2`

**Explanation:** This DB2 member has completed its part of the rebuild processing for the named group buffer pool for the page sets and partitions for which it is the castout owner.  

`value1` indicates the number of pages that this member has castout to DASD for the rebuild. If the new structure has a sufficient number of data entries, then `value1` should normally be zero because DB2 writes the changed pages from the original structure to the new structure. However, if the new structure does not have sufficient space, then `value1` may be greater than zero because DB2 responds to insufficient space in the new structure by casting the changed pages in the original structure to DASD instead of writing them to the new structure.  

`value2` indicates how many changed pages this member wrote to the new structure from the original as part of the rebuild process. If the new structure has sufficient space, then each DB2 that has connectivity to the original structure writes the changed pages for page sets and partitions for which it is the castout owner from the original structure to the new structure, and `value2` indicates the number of pages that the DB2 member wrote.  

`value1` and `value2` would be zero if this member has no page set or partition castout ownership responsibility.  

This message is issued by each DB2 member that has connectivity to the original group buffer pool, and it is always preceded by message DSNB331I.  

**System Action:** If this DB2 member is not the group buffer pool structure owner, then its rebuild work is done, and it notifies MVS that it has completed its part of the rebuild and awaits later notification that all members have completed. If this member is the structure owner, then it proceeds to its final sweep processing (see DSNB333I).  

Refer to "System Action" for message DSNB331I for an explanation of the group buffer pool rebuild processing.

**DSNB333I**  
`csect-name REBUILD FINAL SWEEP COMPLETED FOR GROUP BUFFER POOL gbpname PAGES WRITTEN TO NEW STRUCTURE = value1`

**Explanation:** DB2 has completed the final sweep for the rebuild of the named group buffer pool. A final sweep means that the DB2 member that is the group buffer pool structure owner ensures that all changed pages have either been cast out to DASD or have been written to the new structure after all the page set and partition owners have finished their work. If any changed pages are found in the original structure during the final sweep, then the structure owner writes them out to the new structure. `value1` should be zero in most cases for a manual rebuild. `value1` will probably be greater than zero in most cases where the rebuild was initiated because a DB2 lost connectivity to the group buffer pool.  

This message is issued by the structure owner and is always preceded by message DSNB332I.

**DSNB335I**  
`csect-name REBUILD STOPPED FOR GROUP BUFFER POOL gbpname REASON = reason1 DB2 REASON CODE = reason2`

**Explanation:** A rebuild has been stopped for the named group buffer pool.  

`reason1` indicates why the rebuild was stopped:  

- **OPERATOR**  
  The operator initiated an MVS SETXCF command to stop the rebuild.  

- **LOSSCONNEW**  
  One or more of the DB2 members lost connectivity to the new group buffer pool structure while the rebuild was in progress.  

- **LOSSCONNOld**  
  One or more of the DB2 members lost connectivity to the original group buffer pool structure while the rebuild was in progress.  

- **STRFAILNEW**  
  The new group buffer pool structure failed while the rebuild was in progress.  

- **STRFAILOLD**  
  The original group buffer pool structure failed while the rebuild was in progress.  

- **DB2REASON**  
  DB2 decided to stop the rebuild. The reason code given in `reason2` indicates why DB2 stopped the rebuild.  

- **INSUFFCONN**  
  New structure does not provide connectivity that is better than or equivalent to the current structure.  

- **NOBETRCONN**  
  New structure does not provide better connectivity than the current structure for a `LossConn` rebuild  

If `reason1` indicates 'DB2REASON,' then `reason2` specifies a DB2 reason code that indicates why DB2 stopped the rebuild. If `reason1` is not 'DB2REASON,' then `reason2` is zero.  

This message is normally preceded by message DSNB331I, which indicates that the rebuild was started and the reason why the rebuild was started. This message is issued by each DB2 member participating in the rebuild. This message is followed by message DSNB339I.  

**System Action:** The new structure is discarded. If the original structure is still usable, then all members that still have connectivity to the original structure resume using it. Members that do not have connectivity to the original structure disconnect, and their connections become failed-persistent. If the original structure is not usable, then DB2 initiates damage assessment processing for the group buffer pool.

**System Programmer Response:** If the rebuild stopped because of "DB2REASON," see the explanation for the reason code given.
DSNB338I  sect-name THE REBUILD FOR GROUP BUFFER POOL gbpname HAS COMPLETED SUCCESSFULLY

Explanation: The rebuild for the named group buffer pool has successfully completed.

This message is preceded by message DSNB331I which indicates the reason why the rebuild was started. This message is issued by each DB2 member participating in the rebuild.

System Action: The original structure is discarded and all DB2s that are connected to the group buffer pool begin using the new structure.

DSNB339I  sect-name THE STOP OF THE REBUILD FOR GROUP BUFFER POOL gbpname HAS COMPLETED

Explanation: The stop of the rebuild for the named group buffer pool has completed.

This message is preceded by message DSNB335I which indicates the reason why the rebuild was stopped. This message is issued by each DB2 member participating in the rebuild.

System Action: The new structure is discarded. If the original structure is still usable, then all members that still have connectivity to the original structure resume using it, and members that do not have connectivity to the original structure disconnect and their connection goes into a failed-persistent state.

If the original structure is not usable, then DB2 initiates damage assessment processing for the group buffer pool.

# DSNB340I  sect-name UNEXPECTED ERROR DURING REBUILD FOR GROUP BUFFER POOL gbpname MVS service-name RETURN CODE = rc MVS service-name REASON CODE = reason

Explanation: DB2 received an unexpected error from MVS during rebuild processing for the named group buffer pool.

service-name is one of the following:

IXLREBLD
IXLEEWS

rc is the return code from the MVS service and reason is the reason code.

System Action: DB2 stops the rebuild.

System Programmer Response: See MVS/ESA Programming: Sysplex Services Reference for an explanation of the return and reason code for the named MVS service.

DSNB350I  sect-name DBNAME database SPACE NAME spacename CANNOT BE AUTOMATICALLY RECOVERED. DB2 REASON CODE = reason

Explanation: Following a group buffer pool failure, DB2 cannot automatically recover the named table space or index space. reason specifies a DB2 reason code that indicates why DB2 could not initiate the recovery.

Severity: 4 (warning)

System Action: The partition remains in group buffer pool recovery pending (GRECP) status and is inaccessible.

User Response: Use the DB2 -START DATABASE command on the partition to remove the GRECP status and make the data accessible. You can also use the RECOVER or LOAD utility with the REPLACE option to clear the GRECP status.

DSNB352I  sect-name AUTOMATIC RECOVERY CANNOT BE INITIATED FOR GROUP BUFFER POOL gbp-name REASON = reason

Explanation: Following a failure of the named group buffer pool, DB2 is not able to initiate automatic recovery.

reason indicates the reason why automatic recovery was not initiated:

AUTORECNO The AUTOREC option is set to NO for the group buffer pool.

CONNRELEASE At least one actively connected DB2 member is not at the proper release to support automatic recovery.

Severity: 4 (warning)

System Action: The page sets and partitions that are in group buffer pool recovery pending (GRECP) status remain inaccessible.

User Response: Use the DB2 -START DATABASE command on the page sets and partitions to remove the GRECP status and make the data accessible. You can also use the RECOVER or LOAD utility with the REPLACE option to clear the GRECP status.

If reason is AUTORECNO and you want to enable automatic recovery for the group buffer pool, use the ALTER GROUPBUFFERPOOL command to set AUTOREC to YES for the group buffer pool.

If reason is CONNRELEASE, then you must ensure that all DB2 members in the group are running at the appropriate release. Automatic recovery is not supported unless all members are running Version 5 or a later release.

DSNB353I  sect-name ASYNCHRONOUS GRECP RECOVERY IN PROGRESS FOR GROUP BUFFER POOL bpoolname

Explanation: Following a group buffer pool failure, DB2 triggers an automatic recovery process to attempt to recover GRECP page sets for the specified group buffer pool. This message is issued once by any DB2 member who is the page set castout owner on one of the objects being recovered.
System Action: Check for the DSNB354I message to verify the completion of the automatic recovery process.

**DSNB354I** sect-name ASYNCHRONOUS GRECP RECOVERY HAS COMPLETED FOR GROUP BUFFER POOL bpoolname.

Explanation: DB2 has completed the GRECP recovery process for those GRECP page sets in the group buffer pool specified in the message. This message is issued once by any DB2 member who previously issued a DSNB353I message, who is the page set castout owner on one of the objects being recovered.

**DSNB401I** BUFFERPOOL NAME bpoolname, BUFFERPOOL ID bpid, USE COUNT ucount

Explanation: This message contains the display information that results from a DISPLAY BUFFERPOOL command. For each buffer pool, this message is the first of a set of messages that display information from the DISPLAY BUFFERPOOL command.

The statistics are:

- **bpname**: The buffer pool external name (BP0, BP1,..., BP49, BP8KB, BP16KB BP32K, BP32K1,..., BP32K9).
- **bpid**: The buffer pool internal identifier (0-49, 80-89).
- **ucount**: The number of open table spaces or index spaces that refer to this buffer pool. A zero use count means that the buffer pool is inactive.

System Action: Processing continues.

**DSNB402I** VIRTUAL BUFFERPOOL SIZE = vpsize BUFFERS ALLOCATED = vpalc TO BE DELETED = vptbd IN-USE/UPDATED = vpcba

Explanation: This message, displayed by the DISPLAY BUFFERPOOL command, describes the allocation status of a virtual buffer pool. This message is always preceded by message DSNB401I identifying the associated buffer pool.

The statistics are:

- **vpsize**: The user-specified virtual buffer pool size.
- **vpalc**: Number of allocated buffers in an active virtual buffer pool.
- **vptbd**: Number of buffers to be deleted in an active virtual buffer pool because of pool contraction.
- **vpcba**: Number of currently active (that is, not stealable) buffers in the virtual buffer pool.

System Action: Processing continues.

**DSNB403I** HIPERPOOL SIZE = hpsize BUFFERS, CASTOUT = hpcast ALLOCATED = hpalc TO BE DELETED = hpptbd BACKED BY ES = hpback

Explanation: This message, displayed by the DISPLAY BUFFERPOOL command, describes the allocation status of a hiperpool. This message is always preceded by message DSNB401I identifying the associated buffer pool.

The variables are:

- **hpsize**: The user-specified hiperpool size.
- **hpcast**: The hiperpool’s CASTOUT attribute (YES or NO).
- **hpalc**: Number of allocated buffers in an active hiperpool.
- **hpptbd**: Number of buffers to be deleted in an active hiperpool because of pool contraction.
- **hpback**: Number of buffers backed by expanded storage. For a CASTOUT(YES) hiperpool, this number is higher than the actual number of backed buffers if expanded storage frames were stolen by the system and DB2 did not subsequently try to access the buffers.

This message is issued by the following CSECT: DSNB1DBP

**DSNB404I** THRESHOLDS — VP SEQUENTIAL = vpseq HP SEQUENTIAL = hpseq DEFERRED WRITE = dw1 VERTICAL DEFERRED WRT = dwv1,dwv2 PARALLEL SEQUENTIAL = vppseqt ASSISTING PARALLEL SEQT = vpxpseqt

Explanation: This message is displayed by the DISPLAY BUFFERPOOL command to describe the user-modifiable thresholds for the buffer pool. This message is always preceded by message DSNB401I identifying the associated buffer pool.

The input threshold variables are:

- **vpseq**: Sequential steal threshold for the virtual pool, expressed as a percentage of the total virtual buffer pool size.
- **hpseq**: Sequential steal threshold for the hiperpool, expressed as a percentage of the total hiperpool size.
- **dwt**: Free buffer deferred write threshold for the virtual buffer pool, expressed as a percentage of the total virtual buffer pool size.
- **dwv1**: Vertical deferred write threshold for the virtual buffer pool, expressed as a percentage of the total virtual buffer pool size.
- **dwv2**: Vertical deferred write threshold for the virtual buffer pool, expressed as an absolute number of buffers. **dwt** is used to determine the threshold only if **dwv1** is zero and **dwv2** is non-zero; otherwise **dwv1** is used to determine the threshold.
- **vppseqt**: Sequential threshold for parallel query processing, expressed as a percentage of the virtual sequential steal threshold. When the threshold is set to 0, there is no parallel query processing support.
- **vpxpseqt**: Assisting parallel sequential threshold, expressed as a percentage of the sequential threshold for parallel query processing. **vpxpseqt** allows you to control how much buffer resource is used when this DB2 is assisting another member of the group in parallel processing. When the threshold is set to 0, this buffer pool will not be used to assist other data sharing members in processing a query. In a non-data-sharing environment, this value is ignored.

System Action: Processing continues.
**DSNB405I**  
**spacetype NAMES - sn sn sn sn**

**Explanation:** This message, displayed by the DISPLAY BUFFERPOOL command, lists the names of the hiperspaces or data spaces allocated to a buffer pool. Each DSNB405I message displays up to four space names. If there are more than four, then multiple DSNB405I messages are issued. This message is always preceded by message DSNB4011 identifying the associated buffer pool. spacetype is one of the following:

- **HIPERSPACE** The sn list gives the names of the hiperspaces that are allocated to the hiperpool.
- **DATASPACE** The sn list gives the names of the data spaces that are allocated to the virtual buffer pool.

**System Action:** Processing continues.

---

**DSNB406I**  
**VIRTUAL BUFFERPOOL TYPE - CURRENT = cvptype PENDING = pvptype PAGE STEALING = pgsteal METHOD = pgsteal**

**Explanation:** This message, displayed by the DISPLAY BUFFERPOOL command, describes the current and pending VPTYPE and PGSTEAL attributes. This message is always preceded by message DSNB4011 identifying the associated buffer pool.

- **cvptype** is the virtual buffer pool type (VPTYPE) attribute that is applicable to the current allocation of the virtual buffer pool.
- **PRIMARY** The virtual buffer pool is allocated in the DB2 data base services (ssnmDBM1) address space.
- **DATASPACE** The virtual buffer pool is allocated in one or more data spaces.
- **pvptype** is the pending virtual buffer pool type (VPTYPE) attribute that will be applied for the next allocation of the virtual buffer pool.
- **PRIMARY** The virtual buffer pool is to be allocated in the DB2 data base services (ssnmDBM1) address space.
- **DATASPACE** The virtual buffer pool is to be allocated in one or more data spaces.
- **pgsteal** is the page stealing method (PGSTEAL) that is in use for the virtual buffer pool.
- **LRU** Specifies the virtual buffer pool buffers are managed using the least recently used (LRU) algorithm. This is the default.
- **FIFO** Specifies the virtual buffer pool buffers are managed using the first in first out (FIFO) algorithm.

**System Action:** Processing continues.

---

**DSNB408I**  
**NO DETAIL STATISTICS AVAILABLE FOR BUFFER POOL bpname**

**Explanation:** This message is displayed by the DISPLAY BUFFERPOOL command with the DETAIL option specified. It indicates that no detail statistics are available for the requested buffer pool because the pool was not activated since DB2 startup.

**System Action:** Processing continues.

---

**DSNB409I**  
**INCREMENTAL STATISTICS SINCE basetime**

**Explanation:** This message is displayed by the DISPLAY BUFFERPOOL command with the DETAIL(INTERVAL) option specified. It indicates the start time of the interval for which the statistics were accumulated (that is, the time that the buffer pool was first activated, if there was no previous incremental display).

**System Action:** Processing continues.

---

**DSNB410I**  
**CUMULATIVE STATISTICS SINCE basetime**

**Explanation:** This message is displayed by the DISPLAY BUFFERPOOL command with the DETAIL(*) option specified. It indicates the start time of the interval for which the statistics were accumulated (that is, either the time of the previous display or the time the buffer pool was first activated).

**System Action:** Processing continues.

---

**DSNB411I**  
**RANDOM GETPAGE = rgp SYNC READ I/O (R) = srr SEQ. GETPAGE = sgp SYNC READ I/O (S) = srs DMTH HIT = dmt**

**Explanation:** This message is displayed by the DISPLAY BUFFERPOOL command with the DETAIL option specified. It lists the page read statistics for the buffer pool. This message is always preceded by message DSNB4011 identifying the associated buffer pool.

The statistics are:

- **rgp** Number of nonsequential GETPAGE requests
- **srr** Number of synchronous read I/O operations for nonsequential GETPAGE requests
- **sgp** Number of sequential GETPAGE requests
- **srs** Number of synchronous read I/O operations for sequential GETPAGE requests
- **dmt** Number of times data management threshold was hit

**System Action:** Processing continues.

---

**DSNB412I**  
**SEQUENTIAL PREFetch - REQUESTS = pft PREFetch I/O = pio PAGES READ = pfp**

**Explanation:** This message is displayed by the DISPLAY BUFFERPOOL command with the DETAIL option specified. It lists the sequential prefetch statistics for the buffer pool. This message is always preceded by message DSNB4011 identifying the associated buffer pool.

The statistics are:

- **pft** Number of times sequential prefetch was requested
- **pio** Number of sequential prefetch read I/O operations
- **pfp** Number of pages read because of sequential prefetch

**System Action:** Processing continues.

---

**Explanation:** This message, displayed by the DISPLAY BUFFERPOOL command with the DETAIL option specified, lists the names of the hiperspaces or data spaces allocated to a buffer pool. Each message displays up to four space names. If there are more than four, then multiple messages are issued. This message is always preceded by message DSNB4011 identifying the associated buffer pool. spacetype is one of the following:

- **HIPERSPACE** The sn list gives the names of the hiperspaces that are allocated to the hiperpool.
- **DATASPACE** The sn list gives the names of the data spaces that are allocated to the virtual buffer pool.

**System Action:** Processing continues.

---

**Explanation:** This message, displayed by the DISPLAY BUFFERPOOL command with the DETAIL option specified, lists the page read statistics for the buffer pool. This message is always preceded by message DSNB4011 identifying the associated buffer pool.

The statistics are:

- **rgp** Number of nonsequential GETPAGE requests
- **srr** Number of synchronous read I/O operations for nonsequential GETPAGE requests
- **sgp** Number of sequential GETPAGE requests
- **srs** Number of synchronous read I/O operations for sequential GETPAGE requests
- **dmt** Number of times data management threshold was hit

**System Action:** Processing continues.

---

**Explanation:** This message, displayed by the DISPLAY BUFFERPOOL command with the DETAIL option specified, lists the sequential prefetch statistics for the buffer pool. This message is always preceded by message DSNB4011 identifying the associated buffer pool.

The statistics are:

- **pft** Number of times sequential prefetch was requested
- **pio** Number of sequential prefetch read I/O operations
- **pfp** Number of pages read because of sequential prefetch

**System Action:** Processing continues.
**DSNB413I**  LIST PREFETCH - REQUESTS = pft PREFETCH I/O = pio PAGES READ = pfp

**Explanation:** This message is displayed by the DISPLAY BUFFERPOOL command with the DETAIL option specified. It shows the list prefetch statistics for the buffer pool. This message is always preceded by message DSNB401I identifying the associated buffer pool.

The statistics are:
- **pft** Number of times list prefetch was requested
- **pio** Number of list prefetch read I/O operations
- **pfp** Number of pages read because of list prefetch

**System Action:** Processing continues.

**DSNB414I**  DYNAMIC PREFETCH - REQUESTS = pft PREFETCH I/O = pio PAGES READ = pfp

**Explanation:** This message is displayed by the DISPLAY BUFFERPOOL command with the DETAIL option specified. It shows the dynamic prefetch statistics for the buffer pool. This message is always preceded by message DSNB401I identifying the associated buffer pool.

The statistics are:
- **pft** Number of times dynamic prefetch was requested
- **pio** Number of dynamic prefetch read I/O operations
- **pfp** Number of pages read because of dynamic prefetch

**System Action:** Processing continues.

**DSNB415I**  PREFETCH DISABLED - NO BUFFER = pfd NO READ ENGINE = ree

**Explanation:** This message is displayed by the DISPLAY BUFFERPOOL command with the DETAIL option specified. It lists prefetch statistics for the buffer pool. This message is always preceded by message DSNB401I identifying the associated buffer pool.

The statistics are:
- **pfd** Number of times prefetch was disabled (no buffer)
- **ree** Number of times prefetch was disabled (no asynchronous read processor available)

**System Action:** Processing continues.

**DSNB420I**  SYS PAGE UPDATES = sws SYS PAGES WRITTEN = pws ASYNC WRITE I/O = wio
SYNC WRITE I/O = imw

**Explanation:** This message is displayed by the DISPLAY BUFFERPOOL command with the DETAIL option specified. It lists page write statistics for the buffer pool. This message is always preceded by message DSNB401I identifying the associated buffer pool.

The statistics are:
- **sws** Number of system page updates
- **pws** Number of system pages written
- **wio** Number of asynchronous write I/O operations
- **imw** Number of synchronous write I/O operations

**System Action:** Processing continues.

**DSNB421I**  DWT HIT= dwt VERTICAL DWT HIT=vdw NO WRITE ENGINE=wee

**Explanation:** This message is displayed by the DISPLAY BUFFERPOOL command with the DETAIL option specified. It lists page-write statistics for the buffer pool. This message is always preceded by message DSNB401I identifying the associated buffer pool.

The statistics are:
- **dwt** Number of times deferred write threshold was hit
- **vdw** Number of times vertical deferred write threshold was hit
- **wee** Number of times write engine (asynchronous write processor) was not available for I/O operations

**System Action:** Processing continues.

**DSNB430I**  HIPERPOOL ACTIVITY (NOT USING ASYNCHRONOUS DATA MOVER FACILITY) —
SYNC HP READS=hrs SYNC HP WRITES=hws ASYNC HP READS=hra ASYNC HP WRITES=hrw
READ FAILURES=hra WRITE FAILURES=hrw

**Explanation:** This message is displayed by the DISPLAY BUFFERPOOL command with the DETAIL option specified. It lists statistics about the movement of pages between the virtual buffer pool and the hiperpool. This message is always preceded by message DSNB401I identifying the associated buffer pool. The statistics listed are for pages moved without the use of the Asynchronous Data Mover Facility.

The statistics are:
- **hrs** Number of pages moved from hiperpool to virtual pool synchronously (that is, in response to a page access request by an application)
- **hws** Number of pages moved from virtual buffer pool to hiperpool synchronously (that is, in response to a page access request by an application)
- **hra** Number of pages moved from hiperpool to virtual buffer pool asynchronously (that is, by a DB2 system process such as a sequential prefetch)
- **hrw** Number of pages moved from virtual buffer pool to hiperpool asynchronously (that is, by a DB2 system process such as sequential prefetch)
- **hrf** Number of attempts to read a page from a hiperpool, but the backing E-frame was stolen by the system
- **hrw** Number of attempts to write a page to the hiperpool, but no backing E-frame could be allocated

**System Action:** Processing continues.

**DSNB431I**  HIPERPOOL ACTIVITY (USING ASYNCHRONOUS DATA MOVER FACILITY) — HP READS = arf HP WRITES = awf READ FAILURES = arf WRITE FAILURES = awf

**Explanation:** This message is displayed by the DISPLAY BUFFERPOOL command with the DETAIL option specified. It lists statistics about the movement of pages between the virtual buffer pool and the hiperpool. The statistics listed are for pages moved asynchronously, (that is, by a DB2 system process such as sequential prefetch, using the Asynchronous Data Mover Facility).
The variables are:

- **ara**: Number of pages moved from hiperpool to virtual buffer pool.
- **awu**: Number of pages moved from virtual buffer pool to hiperpool.
- **arf**: Number of pages for which a read request failed.
- **awf**: Number of pages for which a write request failed.

**System Action:** Processing continues.

**DSNB440I** **PARALLEL ACTIVITY — PARALLEL REQUEST**

= **tpa**  **DEGRADED PARALLEL = dpa**

**Explanation:** This message is issued in response to the `DISPLAY BUFFERPOOL` command with `DETAIL` specified. It lists statistics about parallel activities. This message is always preceded by message DSNB401I identifying the associated buffer pool.

The variables are:

- **tpa**: Total number of negotiations with the buffer pool for getting the requested number of sequential prefetch streams.
- **dpa**: Total number of times the negotiation resulted in the degraded mode of parallel operations.

**DSNB453I** **VP Cached Pages — Current = vcount Max = mvcount Changed = ccount Max = mccount**

**Explanation:** This message might be displayed for an active buffer pool by the `DISPLAY BUFFERPOOL` command with `LSTATS` specified. It lists the number of cached pages and the number of changed pages in the virtual buffer pool for a data set. The message is issued only if there are nonzero values to display. This message might be displayed for an active data set belonging to an open table space or index space associated with the buffer pool. The values listed are incremental since the last display for the data set. The message is issued by the following CSECT: DSNB1DBP.

The variables are:

- **vcount**: Number of cached pages in VP for the data set (that is, the number of buffers that contain pages for the data set in the virtual buffer pool).
- **mvcount**: Maximum number of cached pages in VP for the data set since the last `DISPLAY BUFFERPOOL` command with the `LSTATS` option was issued.
- **ccount**: Number of changed pages in VP for the data set (that is, the number of buffers that were changed in the virtual buffer pool for the data set).
- **mccount**: Maximum number of changed pages in VP for the data set since the last `DISPLAY BUFFERPOOL` command with the `LSTATS` option was issued.

**System Action:** Processing continues.

**DSNB454I** **HP Cached Pages — Current = hcount Max = mhcount**

**Explanation:** This message might be displayed for an active buffer pool by the `DISPLAY BUFFERPOOL` command with `LSTATS` specified. It lists the number of cached pages and the number of changed pages in the hiperpool for a data set. The message is issued only if there are nonzero values to display. This message is always preceded by message DSNB401I identifying the associated buffer pool, DSNB464I or DSNB465I identifying the table space or index space, and DSNB466I identifying the data set.

The variables are:

- **hcount**: Number of cached pages in HP for the data set (that is, the number of buffers that contain pages for the data set in the hiperpool).
- **mhcount**: Maximum number of cached pages in HP for the data set since the last `DISPLAY BUFFERPOOL` command with the `LSTATS` option was issued.

**System Action:** Processing continues.

**DSNB455I** **Synchronous I/O Delays — Average Delay = avd Maximum Delay = mxd Total Pages = tpg**

**Explanation:** This message might be displayed for an active buffer pool by the `DISPLAY BUFFERPOOL` command with the `LSTATS` option specified. It lists synchronous I/O delay statistics for a data set belonging to an open table space or index space associated with the buffer pool. The values listed are incremental since the last display for the data set. The message is issued by the following CSECT: DSNB1DBP.

The variables are:

- **avd**: Average I/O delay in milliseconds for pages in the data set.
- **mxd**: Maximum I/O delay in milliseconds for pages in the data set.
- **tpg**: Total number of pages read or written for the data set.

**System Action:** Processing continues.

**DSNB456I** **Asynchronous I/O Delays — Average Delay = avd Maximum Delay = mxd Total Pages = tio Total I/O Count = tio**

**Explanation:** This message might be displayed for an active buffer pool by the `DISPLAY BUFFERPOOL` command with the `LSTATS` option specified. It lists asynchronous I/O delay statistics for a data set belonging to an open table space or index space associated with the buffer pool. The values listed are incremental since the last display for the data set. The message is issued by the following CSECT: DSNB1DBP.

The variables are:
<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>avd</td>
<td>Average I/O delay in milliseconds for pages in the data set</td>
</tr>
<tr>
<td>mxd</td>
<td>Maximum I/O delay in milliseconds for pages in the data set</td>
</tr>
<tr>
<td>tpg</td>
<td>Total number of pages read or written for the data set</td>
</tr>
<tr>
<td>tio</td>
<td>Total number of I/Os issued for the data set</td>
</tr>
</tbody>
</table>

**System Action:** Processing continues.

---

**DSNB459I**

csect-name OPEN FAILURE HAS OCCURRED FOR DATA SET dsn

**Explanation:** This message might be displayed for an active buffer pool by the DISPLAY BUFFERPOOL command with the LIST option specified. It indicates that a previous attempt to access a data set (identified by its relative data set number within a table space or index space) failed due to an allocation or open error.

This message is always preceded by a DSNB401I message identifying the associated buffer pool and a DSNB464I or DSNB465I message identifying the table space or index space.

**System Action:** Processing continues.

---

**DSNB460I**

---PAGE SET/PARTITION LIST INFORMATION--
---DATA SHARING INFO--

| TS GBP MEMBER CASTOUT USE P-LOCK DATABASE SPACE NAME PART IX DEP NAME OWNER COUNT STATE |

**Explanation:** This message displays the column headings that indicate the beginning of a multiple line display generated by a DISPLAY BUFFERPOOL command. The format of the multiple line display has three parts:

- The column headers (DSNB460I), which are underlined.
- Detailed space information for all spaces and partitions requested by the command (DSNB462I).
- An ending message (DSNB463I) that might be displayed if no spaces matched the command criteria.

The text of message DSNB462I provides the detail lines that follow the headings generated by this message. If the DISPLAY BUFFERPOOL LIST command finds more than 255 lines of output to display, the report will be broken up and new headings (DSNB460I) will be displayed with 'CONTINUED' showing in the heading text. This is needed due to the MVS limitation of 255 messages for multi-line WTO messages.

**System Action:** Processing continues.

---

**DSNB461I**

**Explanation:** This message appears within a multiple line display generated by a DISPLAY BUFFERPOOL command. It follows message DSNB460I and is used to underline the column headings that are displayed by DSNB460I.

**System Action:** Processing continues.

---

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>database</td>
<td>Name of the database that is associated with the page set/partition.</td>
</tr>
<tr>
<td>spacenam</td>
<td>Name of the table space or index space.</td>
</tr>
<tr>
<td>part</td>
<td>The partition number. It is blank for a simple table space or simple index space. For non partitioned indexes on a partitioned table space, it is the logical partition number preceded by the character L (for example, L01).</td>
</tr>
<tr>
<td>ty</td>
<td>Whether the object is a table space (TS) or an index space (IX).</td>
</tr>
<tr>
<td>gbp</td>
<td>Whether the page set/partition is GBP-dependent ('Y' for yes; 'N' for no).</td>
</tr>
<tr>
<td>mbr</td>
<td>Name of the member that the detail line pertains to.</td>
</tr>
<tr>
<td>castout</td>
<td>Whether the member identified in this line is the castout owner ('Y' for yes; blank for no).</td>
</tr>
<tr>
<td>use</td>
<td>Number of active claimers or drainers for the page set/partition for the member displayed on this detail line.</td>
</tr>
<tr>
<td>p-lock</td>
<td>P-lock state that the member identified in this line currently holds. Values are:</td>
</tr>
<tr>
<td></td>
<td>IS R/O interest. There are other members who have interest in this page set/partition. The page set/partition is GBP-dependant.</td>
</tr>
<tr>
<td></td>
<td>IX R/W interest. There are other members who have interest in this page set/partition. The page set/partition is GBP-dependant.</td>
</tr>
<tr>
<td></td>
<td>S R/O interest. There may be other members reading the page set/partition. The page set/partition is not GBP-dependant.</td>
</tr>
<tr>
<td></td>
<td>SIX R/W interest. There may be other members who are reading the page set/partition. The page set/partition is GBP-dependant.</td>
</tr>
<tr>
<td></td>
<td>NSU R/W interest. The page set/partition is GBP-dependant.</td>
</tr>
<tr>
<td></td>
<td>X R/W interest. There are no other members accessing the page set/partition. The page set/partition is not GBP-dependant.</td>
</tr>
<tr>
<td></td>
<td>US A temporary state that can be held by a restarting DB2 when 'waiting for retained locks' is enabled.</td>
</tr>
<tr>
<td></td>
<td>### A number that is to be used as a diagnostic aid. A number is displayed only when a DISPLAY BUFFERPOOL</td>
</tr>
</tbody>
</table>
### DSNB464I

**Explanation:** This message displays underlined column headings that indicate the beginning of a multiple line display generated by a DISPLAY BUFFERPOOL command. The format of the multiple line display has three parts:

- Underlined column headings (DSNB464I).
- Detailed space information for the spaces and partitions that are requested by the command (DSNB465I).
- An ending message (DSNB463I) that may be displayed if no spaces matched the command.

The text of message DSNB465I provides the detail lines that follow the headings generated by this message. If the DISPLAY BUFFERPOOL LIST command finds more than 255 lines of output to display, the report will be broken up and new headings (DSNB464I) will be displayed with '(CONTINUED)' showing in the heading text. This is needed due to the MVS limitation of 255 messages for multi-line WTO messages.

**System Action:** Processing continues.

<table>
<thead>
<tr>
<th>DATABASE</th>
<th>SPACE NAME</th>
<th>PART</th>
<th>TS</th>
<th>IX</th>
<th>USE COUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>dbname</td>
<td>spacenam</td>
<td>part</td>
<td>ty</td>
<td>IX</td>
<td>ucount</td>
</tr>
</tbody>
</table>

**Explanation:** The command ignores keyword1 and terminates normally.

### DSNB466I

**Explanation:** This message appears as part of the DISPLAY BUFFERPOOL output if the command did not find any page sets/partitions that matched the selection criteria. For example, the message would be displayed for DIS BPOOL(BP0) GBPDEP(Y) if the command did not find any page sets/partitions that were GBP-dependent.

**User Response:** If you expected to see a list of page sets/partitions, ensure that the syntax of the command was coded correctly. Consider adding or changing the filter keywords to obtain a list of page sets/partitions.

**System Action:** The command terminates normally.

### DSNB467I

**Explanation:** This message appears as part of the DISPLAY BUFFERPOOL output if the command was specified with the LSTATS option. It shows statistics for data sets.

**User Response:** If you expected to see statistics for data sets, ensure that the syntax of the command was coded correctly. Consider adding or changing the filter keywords to obtain the statistics.

**System Action:** Processing continues.

### DSNB468I

**Explanation:** The identified keyword is valid only in a data-sharing environment. Keywords GBPDEP and CASTOWNR can cause this message to be displayed.

**User Response:** Re-enter the command without the keyword since the DB2 is a non-data-sharing DB2.

**System Action:** The command ignores the keyword and terminates normally.

### DSNB469I

**Explanation:** Keyword1 is incompatible with keyword2. For example, in command DIS BPOOL(BP0) GBPDEP(Y) LSTATS(*), keyword GBPDEP indicates that a list of page sets or partitions are desired (as in LIST keyword); however, keyword GBPDEP is ignored because LIST and LSTATS are two different reports.

**User Response:** Omit keyword1 if keyword2 is used on the next entry of the command.

**System Action:** The command ignores keyword1 and terminates normally.
DSNB499I DISPLAY TERMINATED DUE TO INSUFFICIENT MESSAGE SPACE

Explanation: The DISPLAY BUFFERPOOL or the DISPLAY GROUPBUFFERPOOL command was unable to obtain storage for additional messages. This should only happen for a particularly long display request, such as a detail display for a large number of buffer pools or group buffer pools.

System Action: The display is truncated.

System Programmer Response: Reissue the -DISPLAY BUFFERPOOL or the -DISPLAY GROUPBUFFERPOOL command, specifying a smaller number of buffer pools or group buffer pools.

DSNB501I bpname IS NOT A VALID BUFFER POOL NAME

Explanation: An invalid buffer pool name was specified on an ALTER BUFFERPOOL or DISPLAY BUFFERPOOL command. THE VALID NAMES ARE BP0, BP1,..., BP49, BP32K, BP32K1,...BP32K9.

System Action: The request is rejected.

System Programmer Response: Reissue the ALTER BUFFERPOOL or DISPLAY BUFFERPOOL command, specifying a valid buffer pool name.

DSNB502I csect-name VPSIZE FOR bpname MUST BE BETWEEN llimit AND ulimit

Explanation: An attempt was made to change a buffer pool's VPSIZE to an invalid value using the ALTER BUFFERPOOL command. VPSIZE is the number of buffers in the virtual buffer pool.

System Action: The request is rejected.

System Programmer Response: Reissue the ALTER BUFFERPOOL command, specifying a legitimate VPSIZE value.

DSNB503I bpname BUFFER POOL TERMINATED DUE TO INSUFFICIENT MESSAGE SPACE

Explanation: The DISPLAY BUFFERPOOL or the DISPLAY GROUPBUFFERPOOL command was unable to obtain storage for additional messages. This should only happen for a particularly long display request, such as a detail display for a large number of buffer pools or group buffer pools.

System Action: The display is truncated.

System Programmer Response: Reissue the -DISPLAY BUFFERPOOL or the -DISPLAY GROUPBUFFERPOOL command, specifying a smaller number of buffer pools or group buffer pools.

DSNB504I VPSEQT FOR bpname MUST BE BETWEEN 0 AND 100

Explanation: An attempt was made to change a buffer pool's VPSEQT attribute to an invalid value using the ALTER BUFFERPOOL command. VPSEQT is the virtual buffer pool sequential steal threshold. Valid values range from 0 to 100.

System Action: The request is rejected.

System Programmer Response: Reissue the ALTER BUFFERPOOL command, specifying a legitimate VPSEQT value.

DSNB505I HPSEQT FOR bpname MUST BE BETWEEN 0 AND 100

Explanation: An attempt was made to change a buffer pool's HPSEQT attribute to an invalid value using the ALTER BUFFERPOOL command. HPSEQT is the hiperpool sequential steal threshold. Valid values range from 0 to 100.

System Action: The request is rejected.

System Programmer Response: Reissue the ALTER BUFFERPOOL command, specifying a legitimate HPSEQT value.

DSNB506I DWQT FOR bpname MUST BE BETWEEN 0 AND 90

Explanation: An attempt was made to change a buffer pool's DWQT attribute value using the ALTER BUFFERPOOL command. DWQT is the free buffer deferred write threshold. Valid values range from 0 to 90.

System Action: The request is rejected.

System Programmer Response: Reissue the ALTER BUFFERPOOL command, specifying a legitimate DWQT value.

DSNB507I VDWQT FOR bpname MUST BE BETWEEN 0 AND 90

Explanation: An attempt was made to change a buffer pool's VDWQT attribute to an invalid value using the ALTER BUFFERPOOL command. VDWQT is the vertical deferred write threshold. Valid values range from 0 to 90.

System Action: The request is rejected.

System Programmer Response: Reissue the ALTER BUFFERPOOL command, specifying a legitimate VDWQT value.
 explained: An ALTER BUFFERPOOL command specified a VPSIZE or VPTYPE value that would cause the sum of the ssnmDBM1 address space storage requirements for all virtual buffer pools to exceed 1.6GB, or the number of VPTYPE(DATASPACE) buffers to exceed 8,000,000. When calculating the storage requirements for the virtual buffer pools, DB2 uses the page size (4K, 8K, 16K, or 32K) for each VPTYPE(PRIMARY) virtual pool buffer and lookaside pool buffer, and 128 bytes for each VPTYPE(DATASPACE) buffer.

System Action: The buffer pool's VPSIZE or VPTYPE is not changed. Processing for other parameters, if requested, proceeds normally.

System Programmer Response: Rebalance VPSIZE for all buffer pools.

DSNB509I THE TOTAL HPSIZE IS BEYOND THE MAXIMUM LIMIT

Explanation: An ALTER BUFFERPOOL command specified an HPSIZE value that would cause the sum of the HPSIZE value for all buffer pools to exceed 8GB.

System Action: The buffer pool's HPSIZE is not changed. Processing for other parameters, if requested, proceeds normally.

System Programmer Response: Rebalance HPSIZE for all buffer pools.

DSNB510I NO ACTION REQUESTED

Explanation: An ALTER BUFFERPOOL command was issued, but no buffer pool attributes were specified.

System Action: The buffer pool's attributes are not changed.

System Programmer Response: Reissue the ALTER BUFFERPOOL command specifying one or more buffer pool attributes.

DSNB511I VDWQT CANNOT BE GREATER THAN DWQT

Explanation: An ALTER BUFFERPOOL command specified a DWQT and/or VDWQT value that would result in the buffer pool's VDWQT parameter being greater than its DWQT parameter.

System Action: The buffer pool's VDWQT or DWQT is not changed. Processing for other parameters, if requested, proceeds normally.

System Programmer Response: Rebalance DWQT and VDWQT for the buffer pool.

DSNB512I integer IS THE CURRENT VPSIZE FOR BUFFER POOL bpname

Explanation: An ALTER BUFFERPOOL command specified a VPSIZE equal to the buffer pool's current virtual buffer pool size.

System Action: The virtual buffer pool size is not changed. Processing for other parameters, if requested, proceeds normally.

DSNB513I integer IS THE CURRENT HPSIZE FOR BUFFER POOL bpname

Explanation: An ALTER BUFFERPOOL command specified an HPSIZE equal to the buffer pool's current hiperpool size.

System Action: The hiperpool size is not changed. Processing for other parameters, if requested, proceeds normally.

DSNB514I integer IS THE CURRENT VPSEQT FOR BUFFER POOL bpname

Explanation: An ALTER BUFFERPOOL command specified an VPSEQT equal to the current sequential steal threshold of the virtual buffer pool.

System Action: The hiperpool size is not changed. Processing for other parameters, if requested, proceeds normally.

DSNB515I integer IS THE CURRENT HPSEQT FOR BUFFER POOL bpname

Explanation: An ALTER BUFFERPOOL command specified an HPSEQT equal to the current sequential steal threshold of the hiperpool.

System Action: The sequential steal threshold of the hiperpool is not changed. Processing for other parameters, if requested, proceeds normally.

DSNB516I integer IS THE CURRENT DWQT FOR BUFFER POOL bpname

Explanation: An ALTER BUFFERPOOL command specified a DWQT equal to the current deferred write threshold of the buffer pool.

System Action: The deferred write threshold of the buffer pool is not changed. Processing for other parameters, if requested, proceeds normally.

DSNB517I int1, int2 IS THE CURRENT VDWQT FOR BUFFER POOL bpname

Explanation: An ALTER BUFFERPOOL command specified a VDWQT equal to the current vertical deferred write threshold of the buffer pool.

System Action: The vertical deferred write threshold of the buffer pool is not changed. Processing for other parameters, if requested, proceeds normally.

DSNB518I value IS THE CURRENT CASTOUT ATTRIBUTE FOR HIPERPOOL bpname

Explanation: An ALTER BUFFERPOOL command specified a CASTOUT attribute equal to the hiperpool's current CASTOUT attribute.

System Action: The hiperpool's CASTOUT attribute is not changed. Processing for other parameters, if requested, proceeds normally.
csect-name PGSTEAL FOR bpname HAS BEEN SET TO value.

Explanation: This message is issued in response to an ALTER BUFFERPOOL command to indicate that the requested change to the PGSTEAL parameter was accepted.

bpname is the name of the buffer pool.

value is one of the following:

- **LRU**: The virtual buffer pool buffers are managed using the least recently used (LRU) algorithm. This is the default.
- **FIFO**: The virtual buffer pool buffers are managed using the first in first out (FIFO) algorithm.

System Action: Processing continues.

---

READY TO EXPLICITLY DELETE BUFFER POOL bpname

Explanation: This message is issued before draining an active buffer pool in response to an ALTER BUFFERPOOL command, which specified VPSIZE=0 against an active buffer pool.

System Action: After this message is issued, DB2 quiesces all current activities against this buffer pool. DB2 locks the table space exclusively and performs physical close for all open table spaces or index spaces that reference this pool. DB2 also prevents subsequent database access that references this pool. SQL applications get an SQLCODE -904 (resource not available) with reason code 00C200E0 to indicate that the requested virtual buffer pool size is not initialized. After the requested buffer pool is deleted, message DSNB521I is issued.

---

BUFFER POOL bpname HAS BEEN EXPLICITLY DELETED

Explanation: This message is issued after an active buffer pool is explicitly deleted with an ALTER BUFFERPOOL command. This message is always preceded by a corresponding DSNB201 message.

System Action: The virtual storage and hiperspaces associated with this buffer pool are released.

---

VPSIZE FOR bpname HAS BEEN SET TO integer

Explanation: This message is issued in response to an ALTER BUFFERPOOL command to indicate that the requested change to the VPSIZE parameter was accepted. For an active pool, the actual expansion, contraction, creation, or deletion does not take place until after this message is issued.

System Action: Processing continues.

System Programmer Response: Issue the DISPLAY BUFFERPOOL command to determine the actual virtual storage usage for this pool.

---

HPSIZE FOR bpname HAS BEEN SET TO integer

Explanation: This message is issued in response to an ALTER BUFFERPOOL command to indicate that the requested change to the HPSIZE parameter was accepted. For an active hiperpool, the actual expansion, contraction, creation, or deletion does not take place until after this message is issued.

System Action: Processing continues.

System Programmer Response: Issue the DISPLAY BUFFERPOOL command to determine the actual hiperpool size for this pool.

---

VPSEQT FOR bpname HAS BEEN SET TO integer

Explanation: This message is issued in response to an ALTER BUFFERPOOL command. It indicates the successful modification of the sequential steal threshold of the virtual buffer pool.

---

HPSEQT FOR bpname HAS BEEN SET TO integer

Explanation: This message is issued in response to an ALTER BUFFERPOOL command. It indicates the successful modification of the sequential steal threshold of the hiperpool.

---

DWQT FOR bpname HAS BEEN SET TO integer

Explanation: This message is issued in response to an ALTER BUFFERPOOL command. It indicates the successful modification of the deferred write threshold of the buffer pool.

---

VDWQT FOR bpname HAS BEEN SET TO int1,int2

Explanation: This message is issued in response to an ALTER BUFFERPOOL command. It indicates the successful modification of the vertical deferred write threshold of the buffer pool.

---

CASTOUT ATTRIBUTE FOR bpname HAS BEEN SET TO value

Explanation: This message is issued in response to an ALTER BUFFERPOOL command. It indicates that the requested change to the hiperpool's CASTOUT attribute was accepted. For an active pool, the actual rebuilding of the hiperpool with the new CASTOUT attribute does not take place until after this message is issued.

System Action: Processing continues.

System Programmer Response: Use the DISPLAY BUFFERPOOL command to determine the actual CASTOUT attribute for this pool.

---

VPPSEQT FOR bpname HAS BEEN SET TO integer

Explanation: This message is issued in response to the ALTER BUFFERPOOL command. It indicates the successful modification of the parallel sequential steal threshold of the virtual buffer pool.
DSNB530I  integer IS THE CURRENT VPPSEQT FOR BUFFER POOL bpnname

Explanation: An ALTER BUFFERPOOL command specified a VPPSEQT equal to the current parallel sequential steal threshold of the virtual buffer pool. This message is issued by the following CSECT: DSNB1ABP

System Action: The parallel sequential steal threshold of the virtual buffer pool is not changed. Processing for other parameters, if requested, proceeds normally.

DSNB531I  VPPSEQT FOR bpnname MUST BE BETWEEN 0 AND 100

Explanation: An ALTER BUFFERPOOL command was issued to alter a buffer pool's VPPSEQT attribute to an invalid value. VPPSEQT is the parallel sequential steal threshold of the virtual buffer pool. Valid values range from 0 to 100.

System Action: The VPPSEQT value is not changed.

System Programmer Response: Change the VPPSEQT attribute to a valid value and reenter the command.

DSNB532I  VPXPSEQT FOR bpnname HAS BEEN SET TO integer

Explanation: This message is issued from DSNB1ABP csect in response to the ALTER BUFFERPOOL command. It indicates the successful modification of the assisting parallel sequential threshold of the virtual buffer pool.

DSNB533I  integer IS THE CURRENT VPXPSEQT FOR BUFFER POOL bpnname

Explanation: An ALTER BUFFERPOOL command specified a VPXPSEQT equal to the current assisting parallel sequential threshold of the virtual buffer pool. This message is issued from DSNB1ABP csect.

System Action: The assisting parallel sequential threshold of the virtual buffer pool is not changed. Processing for other parameters, if requested, proceeds normally.

DSNB534I  VPXPSEQT FOR bpnname MUST BE BETWEEN 0 AND 100

Explanation: An ALTER BUFFERPOOL command was issued to change a buffer pool's VPXPSEQT attribute to an invalid value. VPXPSEQT is the assisting parallel sequential threshold of the virtual buffer pool. Valid values range from 0 to 100. This message is issued from DSNB1ABP csect.

System Action: The VPXPSEQT value is not changed.

System Programmer Response: Change the VPXPSEQT attribute to a valid value and reenter the command.

DSNB535I  csect-name VTYPE FOR bpnname HAS BEEN SET TO value. IT WILL TAKE EFFECT ON THE NEXT ALLOCATION.

Explanation: This message is issued in response to an ALTER BUFFERPOOL command to indicate that the requested change to the VTYPE parameter was accepted. The new VTYPE value takes effect the next time the buffer pool is allocated.

DSNB536I  csect-name THE TOTAL VIRTUAL BUFFER POOL STORAGE EXCEEDS THE REAL STORAGE CAPACITY

Explanation: This message is issued as a warning that the total amount of allocated virtual buffer pool storage for this DB2 subsystem has exceeded the real storage capacity of the OS/390 image. The amount of real storage should be at least as much as the total amount of virtual buffer pool storage, and should also be enough to accommodate the EDM pool and DB2 working storage in addition to the virtual buffer pool storage. Paging activity in the buffers is an indication of a performance problem.

System Action: Processing continues.

System Programmer Response: Allocate more real storage to the OS/390 image. If there is not enough real storage to hold the buffers, then the number of buffers needs to be reduced. This might mean fewer concurrent users. If the number of buffers is reduced, then DB2 will issue the DSNB538I message when the total amount of virtual buffer pool storage no longer exceeds the real storage capacity.

DSNB537I  csect-name VTYPE AND VPSIZE ARE MUTUALLY EXCLUSIVE WHEN THE VIRTUAL BUFFER POOL IS ALLOCATED

Explanation: An ALTER BUFFERPOOL command specified both VTYPE and VPSIZE keywords while the corresponding virtual buffer pool was allocated. If the virtual buffer pool is allocated, then only one of VTYPE or VPSIZE is allowed.

System Action: The VTYPE and VPSIZE keywords are not processed.

System Programmer Response: Resubmit the command specifying either VTYPE or VPSIZE, but not both. Be aware that the VTYPE change does not take effect immediately. The new VTYPE specification becomes "pending" and will take effect the next time that the buffer pool is allocated, as indicated in message DSNB535I. If other attributes are changed while the pending VTYPE is different than the currently allocated VTYPE, then those altered attributes take effect immediately for the currently allocated pool (they do not become "pending" for the new VTYPE).

DSNB538I  csect-name THE TOTAL VIRTUAL BUFFER POOL STORAGE NO LONGER EXCEEDS THE REAL STORAGE CAPACITY

Explanation: This message is issued following a previous DSNB536E message to indicate that the total amount of allocated virtual buffer pool storage for this DB2 subsystem no longer exceeds the real storage capacity of the OS/390 image.

System Action: Processing continues.
**DSNB540I** csect-name INSUFFICIENT LOCAL CACHE VECTOR STORAGE TO EXPAND VIRTUAL BUFFER POOL bname TO SPECIFIED SIZE size1. VIRTUAL BUFFER POOL SIZE IS NOW size2.

**Explanation:** The specified virtual buffer pool could not be expanded to the requested size (size1). The associated group buffer pool is connected, and the local cache vector could not be expanded to cover the requested virtual buffer pool size.

The local cache vector is a bit array which tracks whether the page in a given buffer was modified by another system (cross-invalidated). There must be one bit in the vector for each buffer in the virtual buffer pool and hiperpool. For more information on the local cache vector, see MVS/ESA Programming: Sysplex Services Reference.

**System Action:** DB2 downgrades the expansion request to the size that can be supported by the available local cache vector storage (size2).

**System Programmer Response:** Free local cache vector storage by contracting or deleting other buffer pools that are connected to a group buffer pool. Then reattempt the virtual pool expansion by reissuing the ALTER BUFFERPOOL command.

**DSNB541I** csect-name INSUFFICIENT LOCAL CACHE VECTOR STORAGE TO CREATE/EXPAND HIPERPOOL bname TO SPECIFIED SIZE size1 HIPERPOOL SIZE IS NOW size2.

**Explanation:** The specified hiperpool could not be created or expanded to the requested size (size1). The associated group buffer pool is connected, and the local cache vector could not be expanded to cover the requested hiperpool size.

The local cache vector is a bit array which tracks whether the page in a given buffer was modified by another system (cross-invalidated). There must be one bit in the vector for each buffer in the virtual buffer pool and hiperpool. For more information on the local cache vector, see MVS/ESA Programming: Sysplex Services Reference.

**System Action:** DB2 downgrades the hiperpool size to the size that can be supported by the available local cache vector storage (size2).

**System Programmer Response:** Free local cache vector storage by contracting or deleting other buffer pools that are connected to a group buffer pool. Then reattempt the hiperpool expansion or creation by issuing the ALTER BUFFERPOOL command.

**DSNB552I** BDS DS WRITE ERROR, RC= integer, RSN= integer

**Explanation:** This message is issued in response to a failure of a WRITE function on the bootstrap data set (BSDS). Check any previous error messages issued by MVS and DB2 against the corresponding BSDS. RC and RSN indicate an error return code and reason code from the BSDS function.

**System Action:** Processing continues.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Analyze the return and reason codes to determine what type of error occurred. Refer to message DSNJ108I for more information.

**DSNB553I** BDS INSERT ERROR, RC= integer, RSN= integer

**Explanation:** This message is issued in response to a failure of an INSERT function on the bootstrap data set (BSDS). Check any previous error messages issued by MVS and DB2 against the corresponding BSDS. RC and RSN indicate an error return code and reason code from the BSDS function.

**System Action:** Processing continues.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Analyze the return and reason codes to determine what type of error occurred. For more information, refer to message DSNJ109I or other DSNJ messages related to BSDS.

**DSNB601I** BUFFER POOL bname FULL

**Explanation:** A buffer is required to access a database page that is not currently contained within the virtual buffer pool. A buffer cannot be assigned because all buffers in the virtual buffer pool are in a nondisplaceable state. (Buffers are in a nondisplaceable state when they contain actively referenced pages or updated pages for which writes are pending.) This message can occur if there is an overload of concurrent activity for the buffer pool size. The variable bname is the buffer pool external name.

**System Action:** Reason code 00C200E9 and the buffer pool external name are recorded in the cursor table (CT), which is available in the SQL communication area (SQLCA) or messages. An SQLCODE -904 (resource not available) is returned to the user.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Do one of the following:
- Reduce concurrent activity by reducing the number of DB2 threads.
- Use the ALTER BUFFERPOOL command to increase the size of the virtual buffer pool.

**DSNB602I** UNABLE TO CREATE BUFFER POOL bname. VIRTUAL BUFFER POOL SIZE IS ZERO

**Explanation:** An attempt to create the buffer pool failed while opening a DB2 table space or index that specified its use. The virtual buffer pool size for bname was zero. This indicates that the use of the pool is invalid.

**System Action:** Reason code 00C200E0 and the buffer pool external name are recorded in the cursor table (CT), which is available in the SQL communication area (SQLCA) or mes-
sages. An SQLCODE -904 (resource not available) is returned to the user.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Use the ALTER TABLESPACE or ALTER INDEX statement to modify affected table spaces or indexes to indicate a usable buffer pool. Use the DISPLAY BUFFERPOOL command to determine a usable buffer pool. If necessary, use the ALTER BUFFERPOOL command to activate the failing buffer pool by setting its VPSIZE to a nonzero value.

---

**DSNB603I** IN SUFFICIENT VIRTUAL STORAGE TO CREATE/EXPAND VIRTUAL BUFFER POOL

**Explanation:** A virtual buffer pool could not be created or expanded to the requested size. Insufficient virtual storage exists within the ssnmDBM1 address space to build the virtual buffer pool. The virtual buffer pool size is set by the ALTER BUFFERPOOL command and can be queried by using the DISPLAY BUFFERPOOL command.

**System Action:** The virtual buffer pool is created or expanded to the size allowed by the available virtual storage. If the virtual buffer pool cannot be created at all, and the creation request was triggered by a page set open by an application, then an SQLCODE -904 (resource not available) is returned to the user. Reason code 00C200E8 and the buffer pool external name are recorded in the cursor table (CT), which is available in the SQL communication area (SQLCA) or messages.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Analyze the virtual storage content of the ssnmDBM1 address space to determine further action. If appropriate, use the ALTER TABLESPACE or ALTER INDEX statement to use a different buffer pool. Otherwise, use ALTER BUFFERPOOL commands to balance virtual storage use for all buffer pools.

---

**DSNB605I** UNABLE TO CREATE VIRTUAL BUFFER POOL

**Explanation:** An attempt to create the virtual buffer pool failed at the time that DB2 was performing its startup or restart processing. Insufficient virtual storage exists within the ssnmDBM1 address space for building the virtual buffer pool. The name of the buffer pool is **bpname**.

**System Action:** The buffer pool is not created. The table space or index open request, which triggered the attempt to create the buffer pool, fails. An SQLCODE -904 (resource not available) is returned to the user. Reason code 00C200E8 and the buffer pool external name are recorded in the cursor table (CT), which is available in the SQL communication area (SQLCA) or messages.

**Operator Response:** Notify the system programmer. This message remains on the console until the operator deletes it.

**System Programmer Response:** Analyze the virtual storage content of the DSNDDBM1 ssnmDBM1 address space to determine further action. If appropriate, use ALTER BUFFERPOOL commands to balance virtual storage use for all buffer pools.

---

**DSNB606I** IN SUFFICIENT VIRTUAL STORAGE TO CREATE/EXPAND HIPERPOOL

**Explanation:** A hiperpool could not be created or expanded to the requested size. Insufficient virtual storage exists within the DSNDDBM1 address space to build the virtual buffer pool. The hiperpool size is set by the ALTER BUFFERPOOL command. Its size can be queried with the DISPLAY BUFFER command. Approximately 20MB of virtual storage is required to construct a 2GB hiperpool.

**System Action:** The hiperpool is created or expanded to the size allowed by the available virtual storage.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Analyze the virtual storage content of the DSNDDBM1 address space for more information. If necessary, rebalance buffer pool virtual storage use for all active buffer pools with the ALTER BUFFERPOOL command.

---

**DSNB607I** UNABLE TO CREATE HIPERPOOL

**Explanation:** DB2 is unable to create an ESO hiperspace to back the hiperpool because there is no expanded storage on the system.

**System Action:** The hiperpool is not created. However, the failure of the hiperpool creation does not have any impact on the creation of the corresponding virtual buffer pool.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Because there is no expanded storage on the system, set the hiperpool size to zero for all buffer pools.

---

**DSNB608I** UNABLE TO CREATE HIPERPOOL

**Explanation:** DB2 is unable to create an ESO hiperspace to back the hiperpool because of an error returned from the MVS DSPSERV macro.

Variables **rr** and **cccc** identify the return and reason codes for the failure.

**System Action:** The hiperpool is not created. However, the failure of the hiperpool creation does not have any impact on the creation of the corresponding virtual buffer pool.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** For more information about the failure, look up the identified return and reason codes in *MVS/ESA Programming: Authorized Assembler Services Reference, Volume 1-4*.

---

**DSNB609I** VIRTUAL BUFFER POOL

**Explanation:** While activating a buffer pool during DB2 startup or restart processing, the virtual buffer pool size was zero. A zero value might be caused by an unusable bootstrap data set (BSDS) or by a DB2 abnormal termination after buffer pool size was altered to zero. The name of the buffer pool is **bpname** and the default buffer pool size is **integer**.
System Action:  DB2 creates the virtual buffer pool using the startup restart default value.  For 4KB/32KB page-type buffer pools, the default values are 1000 and 12, respectively.

Operator Response:  Notify the system programmer.  This message remains on the console until deleted by the operator.

System Programmer Response:  Use the ALTER TABLESPACE or ALTER INDEX statement to modify the affected table spaces or indexes to indicate a usable buffer pool.  To determine a usable buffer pool, use the DISPLAY BUFFERPOOL command.  If necessary, use the ALTER BUFFERPOOL command to activate the failing buffer pool by setting the VPSIZE to a nonzero value.

---

**DSNB610I** UNABLE TO CREATE HIPERPOOL. *bpname* - ASYNCHRONOUS DATA MOVER FACILITY NOT INSTALLED

Explanation:  One of the following events occurred:

- DB2 was building a buffer pool in response to a table space open request and noted that the hiperpool size for the buffer pool was nonzero.
- An ALTER BUFFERPOOL command specified a nonzero hiperpool size for an active buffer pool.

However, the hiperpool could not be created since the Asynchronous Data Mover Facility was not installed on the system and the system does not support the Fast Synchronous Data Mover Facility.

This message is issued by the following CSECT: DSNB1OPS, DSNB1ABP

System Action:  The hiperpool is not created.  However, the absence of the hiperpool has no impact on the virtual buffer pool.

Operator Response:  Notify the system programmer.

System Programmer Response:  Since hiperpools cannot be created, set the hiperpool size for all buffer pools to zero.

---

**DSNB611I** HIPERPOOL *bpname* DELETED — ASYNCHRONOUS DATA MOVER FACILITY IS INOPERATIVE

Explanation:  DB2 was trying to access data in an existing hiperpool and received a failure from the Asynchronous Data Mover Facility indicating that it was inoperative.

System Action:  The hiperpool is deleted.  However, the absence of the hiperpool has no impact on the virtual buffer pool.

Operator Response:  Notify the system programmer.  This message remains on the console until deleted by the operator.

System Programmer Response:  Take appropriate action to restore the availability of the Asynchronous Data Mover Facility.  Once the Asynchronous Data Mover Facility becomes available, use the ALTER BUFFERPOOL command to rebuild the hiperpool.

---

**DSNB740I** csect-name ATTEMPTING TO ESTABLISH DUPLEXING FOR GROUP BUFFER POOL *gbpname*  REASON = *reason*

Explanation:  DB2 has been requested to establish duplexing for the named group buffer pool.  *reason* indicates the reason why duplexing was initiated.  *reason* can be one of the following:

---

**DSNB741I** csect-name HIPERPOOL ATTEMPTING TO ESTABLISH DUPLEXING COULD NOT BE FULLY ESTABLISHED FOR GROUP BUFFER POOL *gbpname*  REASON = *reason*

Explanation:  DB2 was unable to establish duplexing for the named group buffer pool.  *reason* indicates the reason why duplexing could not be established.

---

**DSNB742I** csect-name HIPERPOOL ATTEMPTING TO ESTABLISH DUPLEXING HAS BEEN SUCCESSFULLY ESTABLISHED FOR GROUP BUFFER POOL *gbpname*

Explanation:  The process to establish duplexing for the named group buffer pool has successfully completed.

---

**DSNB743I** csect-name HIPERPOOL ATTEMPTING TO ESTABLISH DUPLEXING IS BEING STOPPED FOR GROUP BUFFER POOL *gbpname*, FALLING BACK TO PRIMARY  REASON = *reason1*  DB2 REASON CODE = *reason2*

Explanation:  Duplexing is being stopped for the named group buffer pool.  To stop the duplexing, the secondary group buffer pool will be deallocated, and DB2 will go back to simplex mode on the primary group buffer pool.

*reason1* indicates why duplexing was stopped:

---

**OPERATOR**  The operator initiated a SETXCF command to initiate duplexing.

**POLICY**  The currently active CFRM policy indicated that duplexing should be automatically established for the group buffer pool.

This message is issued by each DB2 member participating in establishing duplexing.

System Action:  The DB2 members that are actively connected to the named group buffer pool participate in establishing duplexing for the group buffer pool.  Access to the group buffer pool is quiesced while duplexing is being established.

---

**DSNB744I** csect-name HIPERPOOL ATTEMPTING TO ESTABLISH DUPLEXING COULD NOT BE FULLY ESTABLISHED FOR GROUP BUFFER POOL *gbpname*  REASON = *reason*

Explanation:  The currently active CFRM policy indicated that duplexing should be automatically established for the group buffer pool.

This message is issued by each DB2 member participating in establishing duplexing.

System Action:  The DB2 members that are actively connected to the named group buffer pool participate in establishing duplexing for the group buffer pool.  Access to the group buffer pool is quiesced while duplexing is being established.
### DSNB744I  csect-name DUALPLEXING IS BEING STOPPED FOR GROUP BUFFER POOL gbpname, SWITCHING TO SECONDARY REASON = reason1 DB2 REASON CODE = reason2

**Explanation:** Duplexing is being stopped for the named group buffer pool. To stop the duplexing, the primary group buffer pool will be deallocated, and DB2 will switch to the secondary group buffer pool to go back to simplex mode.

**System Programmer Response:** If the rebuild stopped because of "DB2REASON," see the explanation for the reason code given. If duplexing is not automatically reinitiated and duplexing is desired for the group buffer pool, then use the MVS SETXCF command to reestablish duplexing.

**System Action:** The secondary group buffer pool structure is discarded, and DB2 enters back into simplex mode on the primary group buffer pool structure. If DUPLEX(AUTO) is specified in the active CFRM policy for the group buffer pool, then duplexing will be automatically reinitiated, if duplexing is still possible.

**Explanation:** If reason1 indicates 'DB2REASON,' then reason2 specifies a DB2 reason code that indicates why DB2 stopped duplexing. If reason1 is not 'DB2REASON,' then reason2 is zero.

If reason1 indicates 'DB2REASON,' this message is issued by each DB2 member connected to the duplexed group buffer pool.

**DSNB745I  csect-name THE TRANSITION BACK TO SIMPLEX MODE HAS COMPLETED FOR GROUP BUFFER POOL gbpname**

**Explanation:** The named group buffer pool has completed the transition from duplex mode back to simplex mode.

This message is preceded either by message DSNB743I or by message DSNB744I which indicates the reason why duplexing was stopped. This message is issued by each DB2 member connected to the group buffer pool.

**System Programmer Response:** GBPCACHE(NO) and duplexing are mutually exclusive. If you want GBPCACHE(NO) and duplexing are mutually exclusive. If you want GBPCACHE(NO), then you must put the group buffer in simplex mode before specifying GBPCACHE(NO). To put a duplexed group buffer pool in simplex mode, do any of the following procedures:

- Activate a new CFRM policy that specifies DUPLEX(DISABLED) for the group buffer pool. This is the preferred method if you do not intend to duplex the group buffer pool again for awhile.
- Ensure that DUPLEX(AUTO) is not specified in the active CFRM policy for the group buffer pool, and then issue the MVS command SETXCF STOP,REBUILD,DUPLEX.

**DSNB749I  GBPCACHE NO IS NOT ALLOWED FOR gbpname BECAUSE IT IS DUPLEXED**

**Explanation:** This message is issued in response to an ALTER GROUPBUFFERPOOL command that requests a change of the GBPCACHE attribute from YES to NO, but because the group buffer pool is duplexed, the change from YES to NO is not allowed.

**System Programmer Response:** GBPCACHE(NO) and duplexing are mutually exclusive. If you want GBPCACHE(NO), then you must put the group buffer in simplex mode before specifying GBPCACHE(NO). To put a duplexed group buffer pool in simplex mode, do any of the following procedures:

- Activate a new CFRM policy that specifies DUPLEX(DISABLED) for the group buffer pool. This is the preferred method if you do not intend to duplex the group buffer pool again for awhile.
- Ensure that DUPLEX(AUTO) is not specified in the active CFRM policy for the group buffer pool, and then issue the MVS command SETXCF STOP,REBUILD,DUPLEX.

**DSNB750I  DISPLAY FOR GROUP BUFFER POOL gbpname FOLLOWS**

**Explanation:** This message is issued in response to a DISPLAYGROUPBUFFERPOOL command. It signals the beginning of a display for group buffer pool gbpname if the following are true:

- It meets the selection criteria on the command.
- The MVS CFRM administrative policy information for the group buffer pool is accessible.

If the CFRM policy information is unavailable, message DSNB751I signals the partial display of group buffer pool information.

The series of messages DSNB755I through DSNB759I provide information on the group buffer pool's allocation characteristics. Messages DSNB765I through DSNB769I provide information on DB2 connections to the group buffer pool, while DSNB770I through DSNB778I provide statistics on group buffer pool usage. Note that all message numbers in the range might not be used. Message DSNB7790I ends the display.
DSNB751I MVS CFRM POLICY INFORMATION NOT AVAILABLE FOR GROUP BUFFER POOL

Explanation: DB2 could not retrieve group buffer pool policy information in response to a DISPLAY GROUPBUFFERPOOL command. Either the MVS query request (IXCQUERY) did not successfully complete, or the backing structure for the group buffer pool is not defined in the MVS CFRM administrative policy. To determine the exact reason, examine return code retcode and reason code reason returned by MVS on the query request. For an explanation of the IXCQUERY codes, see MVS/ESA Programming: Sysplex Services Reference. If the IXCQUERY request did not complete successfully, no CONNLIST information, even if requested, is provided.

System Action: Processing continues, but the information displayed is incomplete.

DSNB752I GROUP DETAIL STATISTICS ARE NOT AVAILABLE FOR THE GROUP BUFFER POOL BECAUSE A REBUILD IS IN PROGRESS

Explanation: Because a rebuild is in progress for the group buffer pool, DB2 cannot retrieve group buffer pool group (GDETAIL) statistics in response to a DISPLAY GROUPBUFFERPOOL command. A preceding DSNB750I or DSNB751I message identifies the associated group buffer pool.

System Action: Processing continues.

DSNB753I GROUP BUFFER POOL STRUCTURE OWNER INFORMATION NOT AVAILABLE IRLM NOTIFY RETURN CODE = retcode IRLM NOTIFY REASON CODE = reason

Explanation: DB2 could not retrieve group buffer pool structure owner information for message DSNB798I because the IRLM Notify request did not successfully complete. A preceding DSNB750I or DSNB751I message identifies the associated group buffer pool.

retcode Return code from IRLM on the Notify request
reason Reason code from IRLM on the Notify request

For an explanation of IRLM return and reason codes, see "IRLM Error Return and Reason Codes on page 1025.

System Action: Processing continues.

DSNB755I DB2 GROUP BUFFER POOL STATUS CONNECTED = status1 CURRENT DIRECTORY TO DATA RATIO = ratio1 PENDING DIRECTORY TO DATA RATIO = ratio2

Explanation: In response to a DISPLAY GROUPBUFFERPOOL command, this is the first of two messages displaying information about the status of the group buffer pool as it is known to DB2. This message is followed by DSNB756I. A preceding DSNB750I or DSNB751I message identifies the associated group buffer pool.

status1 Whether this DB2 is connected to the group buffer pool:

YES This DB2 is actively connected to the group buffer pool.
NO This DB2 is not actively connected to the group buffer pool.

ratio1 The ratio of directory entries to data pages, as specified for the current allocation of this group buffer pool. If the group buffer pool is not currently allocated, this field contains blanks.

ratio2 The desired ratio of directory entries to data pages to take effect at the next reallocation of the group buffer pool.

DSNB756I CLASS CASTOUT THRESHOLD = threshold1 % GROUP BUFFER POOL CASTOUT THRESHOLD = threshold2 % GROUP BUFFER POOL CHECKPOINT INTERVAL = interval MINUTES RECOVERY STATUS = status1 AUTOMATIC RECOVERY = auto-rec-parm

Explanation: This is the second of two messages displaying information about the status of the group buffer pool as it is known to DB2. If DB2 was successful in getting MVS CFRM policy information for the group buffer pool, messages DSNB757I through DSNB759I immediately follow this message. A preceding DSNB750I or DSNB751I message identifies the associated group buffer pool.

threshold1 The threshold at which class castouts are to be initiated. It is expressed as a percentage of the group buffer pool size.

threshold2 The threshold at which castout is to be initiated at the group buffer pool level. It is expressed as a percentage of the group buffer pool size.

interval The time, in minutes, between successive initiations of group buffer pool checkpoint.

status1 The recovery status for the group buffer pool:

DAP Damage assessment pending. DB2 is in the process of doing damage assessment for the group buffer pool in response to a coupling facility structure failure. The group buffer pool is temporarily stopped internally by DB2 and is unavailable for use until the damage assessment process completes.

NORMAL There is no pending recovery action for this group buffer pool.

auto-rec-parm Automatic recovery parameter specification:

YES DB2 should automatically initiate recovery for the objects using this group buffer pool following a failure of the group buffer pool. This is the default.

NO DB2 should not initiate automatic group buffer pool recovery. If the group buffer pool fails, you must manually issue DB2 -START DATABASE commands to do the recovery.
Explanation: For a DISPLAY GROUPBUFFERPOOL command, this message gives the status for the structure associated with the group buffer pool. It is displayed only if DB2 was successful in querying the MVS CFRM administrative policy. It is immediately preceded by message DSNB756I, and if the structure is allocated, followed by messages DSNB758I and DSNB759I. A preceding DSNB750I message identifies the associated group buffer pool.

coupling facilityname
The backing coupling facility structure name for this group buffer pool, such as DSNCAT_GBP0.

status2
MVS global status of the backing coupling facility structure:
NORMAL Structure is defined in the current CFRM policy and has no current MVS restrictions.
CHNGP Change pending in the structure policy.

psize
The size (in kilobytes) of the coupling facility structure as indicated in the CFRM policy definition.

status1
Whether the backing coupling facility structure is currently allocated:
YES The coupling facility structure is allocated in a coupling facility.
NO The coupling facility structure is not allocated in any coupling facility.

Explanation: This message is the first of two messages giving the allocation details for the group buffer pool on a DISPLAY GROUPBUFFERPOOL command. It is issued only if DB2 determines, by successfully querying the MVS CFRM policy, that the group buffer pool is allocated. It is immediately preceded by message DSNB757I. A preceding DSNB750I message identifies the associated group buffer pool.

asize
The actual allocated group bufferpool structure size (in kilobytes).

volstat
The volatility status of the backing group buffer pool structure for this group buffer pool:
VOLATILE The backing coupling facility structure is volatile.
NON-VOLATILE The backing coupling facility structure is non-volatile.

rbldstat
Indication of whether or not rebuild is in progress for the group buffer pool structure, and if so, which part of the rebuild process is happening. rbldstat can also indicate whether or not the group buffer pool is duplexed, or transitioning from duplex mode. rbldstat can display the following values:

NONE Rebuild is not in progress.
QUIESCE Rebuild is in progress and the rebuild is currently in the rebuild quiesce phase.
CONNECT Rebuild is in progress and the rebuild is currently in the rebuild connect phase.
CLEANUP The rebuild has completed, and the connected DB2 members are making final preparations to use the new group buffer pool structure.
STOPPING The rebuild is stopping, and the connected DB2 members are making preparations to fall back to the original group buffer pool structure.

# DUPLEXED The group buffer pool is in duplex mode.
# SWITCHING The group buffer pool is returning to simplex mode from duplex mode, switching to the secondary group buffer pool.

# cfname The name of the coupling facility in which this group buffer pool is allocated. If the group buffer pool is duplexed, cfname is the coupling facility name associated with the primary group buffer pool.
# clevel The coupling facility level for the coupling facility in which this group buffer pool is allocated. If the group buffer pool is duplexed, clevel is the coupling facility level associated with the primary group buffer pool.

Explanation: This message is the second of two messages giving the allocation details for the group buffer pool for a DISPLAY GROUPBUFFERPOOL command. It is issued only if DB2 determines, by successfully querying the MVS CFRM administrative policy, that the group buffer pool is allocated. It is immediately preceded by message DSNB758I. A preceding DSNB750I message identifies the associated group buffer pool.

dir#
Actual number of directory entries allocated for the coupling facility structure.

data#
Actual number of data pages allocated for the coupling facility structure.

conn#
The number of DB2 subsystems that are connected to the coupling facility structure. This includes both active connections and failed-persistent connections. The CONNLIST option of the DISPLAY GROUPBUFFERPOOL command gives details of the connection status.
Explanation: This message is issued in response to the DISPLAY GROUPBUFFERPOOL command with the MDETAIL option if the group buffer pool is not defined with GBPCACHE NO, and therefore does not meet the qualification to be displayed. This message is issued once for each group buffer pool that does not match the “GBPCACHE NO” criterion.

System Action: The display is terminated for this group buffer pool. Command processing continues, if there are other group buffer pool names to process.

Explanation: This message is displayed as a result of the DISPLAY GROUPBUFFERPOOL command with the MDETAIL option if the group buffer pool is duplexed. It lists the statistics on writes to the secondary group buffer pool. The displayed value of this counter is not affected by whether this is an incremental or cumulative display. If the group buffer pool is not defined with GBPCACHE NO, and therefore does not meet the qualification to be displayed. This message is issued once for each group buffer pool that does not match the “GBPCACHE NO” criterion.

For information about the Group Detail Report, see DB2 Data Sharing: Planning and Administration.

Explanation:

**DSNB760I**

**GBPCACHE OPTION SET TO** *value* **FOR**

*gbpname*. **IT WILL TAKE EFFECT ON THE NEXT REALLOCATION**

**Explanation:** This message is issued in response to an ALTER GROUPBUFFERPOOL command that requests a change in the GBPCACHE attribute. It is also issued for the first ALTER GROUPBUFFERPOOL command for a group buffer pool, even when the GBPCACHE option is not specified on the command. (In this case, the message shows YES for the GBPCACHE option.) The new setting takes effect the next time the coupling facility cache structure is allocated.

**System Programmer Response:** Use the MVS command SETXCF START, REBUILD when you are ready for the change to take effect.

**System Action:** Processing continues.

**DSNB761I**

**THE NEW SETTING WILL TAKE EFFECT**

**AFTER THE GBPCACHE ATTRIBUTE HAS BEEN CHANGED TO YES**

**Explanation:** This message is issued in response to an ALTER GROUPBUFFERPOOL command that requests a change to RATIO, CLASST, GBPPOOL or GBPCHECK when GBPCACHE NO is also specified on the command or when the current GBPCACHE attribute is NO. The new setting takes effect the next time the coupling facility cache structure is allocated after the GBPCACHE attribute has been changed to YES.

**System Programmer Response:** Use the ALTER GROUPBUFFERPOOL command to change the GBPCACHE attribute to YES and the MVS command SETXCF START, REBUILD when you are ready for the change to take effect.

**System Action:** Processing continues.

**DSNB762I**

**DUPLEXING STATISTICS FOR** *secondary-gbpname* **WRITES CHANGED PAGES =** *s1*

**FAILED DUE TO LACK OF STORAGE =** *s2*

**CHANGED PAGES SNAPSHOT VALUE =** *s3*

**Explanation:** This message is issued as a result of the DISPLAY GROUPBUFFERPOOL command with TYPE(NOCACHE) and either one name or a list of names specified in the selection list. The specified group buffer pool is not defined with GBPCACHE NO, and therefore does not meet the qualification to be displayed. This message is issued once for each group buffer pool that does not match the “GBPCACHE NO” criterion.

**System Action:** The display is terminated for this group buffer pool. Command processing continues, if there are other group buffer pool names to process.

**DSNB763I**

**gbpname** **IS NOT DEFINED WITH GBPCACHE NO**

**Explanation:** This message is issued in response to a DISPLAY GROUPBUFFERPOOL command with TYPE(NOCACHE) and either one name or a list of names specified in the selection list. The specified group buffer pool is not defined with GBPCACHE NO, and therefore does not meet the qualification to be displayed. This message is issued once for each group buffer pool that does not match the “GBPCACHE NO” criterion.

**System Action:** The display is terminated for this group buffer pool. Command processing continues, if there are other group buffer pool names to process.

**DSNB764I**

**DUPLEXING STATISTICS FOR** *secondary-gbpname* **WRITE HIT COUNTER**

**TOTAL CHANGED** counter. Snapshot value of the current number of changed pages in the secondary group buffer pool. The displayed value of this counter is not affected by whether this is an incremental or cumulative display. If the group buffer pool is duplexed, then this number should be roughly equal to the total changed counter reported in message DSNB786I for the primary group buffer pool. However, due to timing windows in gathering the counter information for the display, or due to previous transaction failures that might have occurred, the counts might not be exactly the same.

For information about the Member Detail Report, see DB2 Data Sharing: Planning and Administration.
**DSNB765I - MEMBER DETAIL STATISTICS ARE NOT AVAILABLE FOR THE GROUP BUFFER POOL.**

**Explanation:** This message is issued in response to a DISPLAY GROUPBUFFERPOOL command with the MDETAIL option specified. MDETAIL statistics are not available for the requested group buffer pool because this DB2 has not connected to the group buffer pool since startup. A preceding DSNB750I or DSNB751I message identifies the associated group buffer pool.

**System Action:** Processing continues.

---

**DSNB766I - THE CONNLIST REPORT FOLLOWS**

**Explanation:** DB2 displays this message in response to a DISPLAY GROUPBUFFERPOOL command with the CONNLIST option to indicate the beginning of the CONNLIST display for this group buffer pool. A preceding DSNB750I message identifies the associated group buffer pool.

---

**DSNB770I - MEMBER DETAIL STATISTICS ARE SYNONYMOUS READS DUE TO BUFFER INVALIDATION DATA RETURNED = \( r1 \) DATA NOT RETURNED = \( r2 \)**

**Explanation:** This is the first of eight messages containing local statistics, displayed as a result of the DISPLAY GROUPBUFFERPOOL command with the MDETAIL option. It lists some synchronous read statistics for the group buffer pool. A preceding DSNB750I or DSNB751I message identifies the associated group buffer pool. Messages DSNB774I, DSNB775I, DSNB789I, and DSNB776I through DSNB779I always follow this one.

The counter descriptions are listed below. In the descriptions, the term “synchronous” means that the coupling facility interaction is done under the DB2 user’s execution unit.

- \( r1 \) Synchronous coupling facility read requests issued because the virtual buffer or hiperpool buffer was marked “invalid.” Data is successfully returned from the group buffer pool.
- \( r2 \) Synchronous coupling facility read requests issued because the virtual buffer or hiperpool buffer was marked “invalid.” Data is not returned from the group buffer pool.

---

**DSNB771I - INCREMENTAL MEMBER DETAIL STATISTICS SINCE basetime**

**Explanation:** This message is displayed in response to the DISPLAY GROUPBUFFERPOOL command with MDETAIL(*INTERVAL) specified. It indicates the start time of the interval for which the statistics were accumulated. This is the time of the previous MDETAIL incremental display on this DB2 or the time DB2 first connected to the group buffer pool if there was no previous MDETAIL incremental display. A preceding DSNB750I or DSNB751I message identifies the associated group buffer pool.

**System Action:** Processing continues.

---

**DSNB772I - CUMULATIVE MEMBER DETAIL STATISTICS SINCE basetime**

**Explanation:** This message contains the display information that results from a DISPLAY GROUPBUFFERPOOL command with the CONNLIST option. One DSNB767I message is issued for each defined connection to the group buffer pool. The associated group buffer pool is identified on a preceding DSNB750I message.

**Conname**

Name of the connection. DB2 subsystems use the DB2 member name as the connection name.

**Status**

Status of the connection.

- A Active.
- F Failed-Persistent.
- D Dually connected to both the original structure and the new structure during a rebuild.

**DB2 Release**

The release of the connected DB2.

---

**DSNB773I - MEMBER DETAIL STATISTICS SYNCHRONOUS READS DUE TO BUFFER INVALIDATION DATA RETURNED = \( r1 \) DATA NOT RETURNED = \( r2 \)**

**Explanation:** This is the first of eight messages containing local statistics, displayed as a result of the DISPLAY GROUPBUFFERPOOL command with the MDETAIL option. It lists some synchronous read statistics for the group buffer pool. A preceding DSNB750I or DSNB751I message identifies the associated group buffer pool. Messages DSNB774I, DSNB775I, DSNB789I, and DSNB776I through DSNB779I always follow this one.

The counter descriptions are listed below. In the descriptions, the term “synchronous” means that the coupling facility interaction is done under the DB2 user’s execution unit.

- \( r1 \) Synchronous coupling facility read requests issued because the virtual buffer or hiperpool buffer was marked “invalid.” Data is successfully returned from the group buffer pool.
- \( r2 \) Synchronous coupling facility read requests issued because the virtual buffer or hiperpool buffer was marked “invalid.” Data is not returned from the group buffer pool.
If \( RPL \) is not in use, then this is the number of coupling
followed by messages \( DSNB777I \) through \( DSNB779I \).

messages \( DSNB773I \) through \( DSNB775I \) and \( DSNB789I \) and
ated group buffer pool. This message is always preceded by
ceding \( DSNB750I \) or \( DSNB751I \) message identifies the associ-
lists some local write statistics for the group buffer pool. A pre-
GROUPBUFFERPOOL command with the MDETAIL option. It
taining local statistics, displayed as a result of the DISPLAY

Explanation: This is the second of eight messages contain-
taining local statistics, displayed as a result of the DISPLAY
GROUPBUFFERPOOL command with the MDETAIL option. It
lists more local synchronous read statistics for the group buffer
pool. A preceding \( DSNB750I \) or \( DSNB751I \) message identifies the
associated group buffer pool. This message is always pre-
ced by message \( DSNB773I \) and followed by messages
\( DSNB775I \), \( DSNB789I \), and \( DSNB776I \) through \( DSNB779I \).

The counter descriptions are listed below. In the descriptions,
the term "synchronous" means that the coupling facility inter-
action is done under the DB2 user's execution unit.

\( r3 \)  Synchronous coupling facility read requests issued
because the required data was not in the virtual buffer
pool or in the hiperpool buffer. Data is successfully
returned from the group buffer pool.

\( r4 \)  Synchronous coupling facility read requests issued
because the required data was not in the virtual buffer
pool or hiperpool buffer. Data is not returned from the
group buffer pool.

\( DSNB775I \)  P R E F E T C H  R E A D S  D A T A  N O T  R E T U R N E D  =  
\( r5 \)  R E G I S T E R  P A G E  L I S T  N O T  A V A I L A B L E  D A T A  R E T U R N E D  =  \( r6 \)

Explanation: This is the third of eight messages containing
local statistics, displayed as a result of the DISPLAY
GROUPBUFFERPOOL command with the MDETAIL option. It
lists some prefetch read statistics for the group buffer pool. A
preceding \( DSNB750I \) or \( DSNB751I \) message identifies the
associated group buffer pool.

\( r5 \)  If the "register page list" (RPL) function is not in use, then
this is the number of coupling facility read requests
issued for prefetch where data is not returned from the
group buffer pool.

If RPL is in use, then this is the number of pages that
were not retrieved from the group buffer pool following
the RPL request (these pages were retrieved from
DASD). Note that if RPL is in use, then there are not any
coupling facility interactions associated with this number;
this number is incremented when the RPL feedback indi-
cates that the page is not cached in the GBP, and so
DB2 can avoid a coupling facility read request for the
page and go directly to DASD.

\( r6 \)  If RPL is not in use, then this is the number of coupling
facility read requests issued for prefetch where data is
returned from the group buffer pool.

If RPL is in use, then this number should be zero.

\( DSNB776I \)  S Y N C H R O N O U S  W R I T E S  C H A N G E D  P A G E S  =  
\( w1 \)  C L E A N  P A G E S  =  \( w2 \)

Explanation: This is the fifth of eight messages containing
local statistics, displayed as a result of the DISPLAY
GROUPBUFFERPOOL command with the MDETAIL option. It
lists some local write statistics for the group buffer pool. A pre-
ceeding \( DSNB750I \) or \( DSNB751I \) message identifies the associ-
ated group buffer pool. This message is always preceded by
messages \( DSNB773I \) through \( DSNB775I \) and \( DSNB789I \) and
followed by messages \( DSNB777I \) through \( DSNB779I \).

The counter descriptions are listed below. In the descriptions,
the term "synchronous" means that the coupling facility inter-
action is done under the DB2 user's execution unit.

\( w1 \)  Synchronous coupling facility write requests for changed
pages

\( w2 \)  Synchronous coupling facility write requests for clean
pages

\( DSNB777I \)  A S Y N C H R O N O U S  W R I T E S  C H A N G E D  P A G E S  
\( = \) \( w3 \)  C L E A N  P A G E S  =  \( w4 \)  F A I L E D  W R I T E S  D U E  T O  L A C K  O F  S T O R A G E  =  \( w5 \)

Explanation: This is the sixth of eight messages containing
local statistics, displayed as a result of the DISPLAY
GROUPBUFFERPOOL command with the MDETAIL option. It
lists local write and cross-invalidation statistics for the group
buffer pool. A preceding \( DSNB750I \) or \( DSNB751I \) message identifies the associated group buffer pool. This message is always pre-
ced by messages \( DSNB773I \) through \( DSNB775I \), \( DSNB789I \), and \( DSNB776I \) and followed by messages
\( DSNB778I \) and \( DSNB779I \).

The counter descriptions are listed below. In the descriptions,
the term "asynchronous" means that the coupling facility inter-
action is done under a DB2 system execution unit, such as
with a prefetch.

\( w3 \)  Asynchronous coupling facility write requests for changed
pages

\( w4 \)  Asynchronous coupling facility write requests for clean
pages

\( w5 \)  Coupling facility write requests that were not completed
because of a lack of storage in the group buffer pool.

\( DSNB778I \)  C A S T O U T  T H R E S H O L D S  D E T E C T E D  F O R  C L A S S E S  =  \( t1 \)  F O R  G R O U P  B U F F E R  P O O L  =  
\( t2 \)  G B P  C H E C K P O I N T S  T R I G G E R E D  =  \( k1 \)  P A R T I C I P A T I O N  I N  R E B U I L D  =  \( k2 \)

Explanation: This is the seventh of ten messages containing
local statistics, displayed as a result of the DISPLAY
GROUPBUFFERPOOL command with the MDETAIL option. It
lists local castout threshold statistics for the group buffer pool
and also group buffer pool checkpoint and rebuild statistics. A
preceding \( DSNB750I \) or \( DSNB751I \) message identifies the
associated group buffer pool. This message is always pre-
ced by messages \( DSNB773I \) through \( DSNB775I \), \( DSNB789I \),
\( DSNB776I \), and \( DSNB777I \) and followed by messages
\( DSNB796I \), \( DSNB779I \), and \( DSNB779I \).

Counters:

\( t1 \)  Number of times the cast out threshold was
detected

\( t2 \)  Number of times the group buffer pool castout
threshold was detected

\( k1 \)  Number of group buffer pool checkpoints that were
triggered.

\( k2 \)  Number of times that this member participated in a
rebuild of the group buffer pool structure.
**DSNB779I**  
ENGINES NOT AVAILABLE FOR CASTOUT = e1  
FOR WRITING = e2  

Explanation: This is the ninth of ten messages containing local statistics, displayed as a result of the DISPLAY GROUPBUFFERPOOL command with the MDETAIL option. It lists miscellaneous local statistics for the group buffer pool. The associated group buffer pool is identified in a preceding DSNB750I or DSNB751I message. This message is always preceded by messages DSNB773I through DSNB775I, DSNB789I, DSNB776I through DSNB788I, and DSNB796I. It is followed by message DSNB797I.

Counters:
- e1  Engine not available for castout
- e2  Engine not available for coupling facility write

**DSNB780I**  
GROUP DETAIL STATISTICS ARE NOT AVAILABLE FOR THE GROUP BUFFER POOL. THIS DB2 IS NOT CURRENTLY CONNECTED TO THE GROUP BUFFER POOL.

Explanation: DB2 could not retrieve group buffer pool group (GDETAIL) statistics in response to a DISPLAY GROUPBUFFERPOOL command because this DB2 subsystem is not currently connected to the group buffer pool. A preceding DSNB750I or DSNB751I message identifies the associated group buffer pool.

System Action: Processing continues.

**DSNB781I**  
GROUP DETAIL STATISTICS ARE NOT AVAILABLE FOR THE GROUP BUFFER POOL. MVS IXLCACHE RETURN CODE = retcode  
IXLCACHE REASON CODE = reason

Explanation: DB2 could not retrieve group buffer pool group (GDETAIL) statistics in response to a DISPLAY GROUPBUFFERPOOL command because the statistics request (IXLCACHE macro) did not successfully complete. A preceding DSNB750I or DSNB751I message identifies the associated group buffer pool.

\[ r1 \text{ "Read hit" counter. Number of times that a page was returned on a coupling facility read request.} \] 
For an explanation of IXLCACHE return and reason codes, see MVS/ESA Programming: Sysplex Services Reference.

System Action: Processing continues.

**DSNB782I**  
INCREMENTAL GROUP DETAIL STATISTICS SINCE basetime

Explanation: This message is displayed by the DISPLAY GROUPBUFFERPOOL command with GDETAIL(INTERVAL) specified. It indicates the start time of the interval for which the statistics were accumulated. This is the time of the previous GDETAIL incremental display from this DB2 or the time the group buffer pool was allocated or reallocated, if there was no previous GDETAIL incremental display.

System Action: Processing continues.

**DSNB783I**  
CUMULATIVE GROUP DETAIL STATISTICS SINCE basetime

Explanation: This message is displayed in response to the DISPLAY GROUPBUFFERPOOL command with GDETAIL(*) specified. It indicates the start time of the interval for which the statistics were accumulated. This is the time the group buffer pool was first allocated or reallocated.

System Action: Processing continues.

**DSNB784I**  
GROUP DETAIL STATISTICS READS DATA RETURNED = r1  
DIRECTORY ENTRY EXISTED = r2  
DIRECTORY ENTRY CREATED = r3  
DIRECTORY ENTRY NOT CREATED = r4, r5

Explanation: This is the first of five messages containing group statistics, displayed as a result of the DISPLAY GROUPBUFFERPOOL command with the GDETAIL option. It lists the successful reads for the group buffer pool. A preceding DSNB750I or DSNB751I message identifies the associated group buffer pool. This message is always followed by messages DSNB785I through DSNB788I.

\[ r1 \text{ "Read hit" counter. Number of times that a page was returned on a coupling facility read request.} \]

For information about the Group Detail Report, see DB2 Data Sharing: Planning and Administration .

**DSNB785I**  
DATA NOT RETURNED DIRECTORY ENTRY EXISTED = r2  
DIRECTORY ENTRY CREATED = r3  
DIRECTORY ENTRY NOT CREATED = r4, r5

Explanation: This is the second of five messages containing group statistics, displayed as a result of the DISPLAY GROUPBUFFERPOOL command with the GDETAIL option. It continues the read statistics for the group buffer pool. The associated group buffer pool is identified in a preceding DSNB750I or DSNB751I message. This message is always preceded by message DSNB784I and followed by messages DSNB786I through DSNB788I.

All the "read counters" in this message represent cases where data was not returned on the coupling facility read request.

\[ r2 \text{ "Read miss directory hit" counter. Number of times that a coupling facility read request specified a page for which a directory entry exists, but no data was cached for that page.} \]

\[ r3 \text{ "Read miss name assigned" counter. Number of times that a coupling facility read request specified a page for which a directory entry was created.} \]

\[ r4 \text{ "Read miss assignment suppressed" counter. Number of times that a coupling facility read request specified a page for which no directory entry exists and no directory entry is created.} \]

\[ r5 \text{ "Read miss cache full" counter. Number of times that a coupling facility read request specified a page for which no directory entry exists and no directory entry is created because of a lack of storage in the group buffer pool.} \]

For information about the Group Detail Report, see DB2 Data Sharing: Planning and Administration .
DSNB786I  WRITES  CHANGED  PAGES  =  w1  CLEAN  PAGES  =  w2  FAILED  DUE  TO  LACK  OF  STORAGE  =  w3  CHANGED  PAGES  SNAP-SHOT  VALUE  =  p1

Explanation:  This  is  the  third  of  five  messages  containing  group  statistics,  displayed  as  a  result  of  the  DISPLAY GROUPBUFFERPOOL  command  with  the  GDETAIL  option.  It  is followed  by  messages  DSNB787I  and  DSNB788I.  It  lists  the statistics  on  writes  to  the  group  buffer  pool  and  the  total number  of  changed  pages  for  the  group  buffer  pool.  The associated  group  buffer  pool  is  identified  in  a  preceding  DSNB750I or  DSNB751I  message.  This  message  is  always  preceded  by messages  DSNB784I  and  DSNB785I.

w1  "Changed  page  write  hit"  counter.  Number  of  times  a coupling  facility  write  request  for  a  changed  page  successfully  completed.

w2  "Clean  page  write  hit"  counter.  Number  of  times  a  coupling  facility  write  request  for  a  clean  page  completed  successfully.

w3  "Write  miss  cache  full"  counter.  Number  of  times  a  coupling  facility  write  request  was  not  completed  because  of a  lack  of  storage  in  the  group  buffer  pool.

p1  "Total  changed"  counter.  Snapshot  value  of  the  current number  of  changed  pages.  The  displayed  value  of  this  counter  is  not  affected  by  whether  this  is  an  incremental  or  cumulative  display.

For  information  about  the  Group  Detail  Report,  see  DB2  Data Sharing:  Planning  and  Administration.

DSNB787I  RECLAIMS  FOR  DIRECTORY  ENTRIES  =  d1  FOR  DATA  ENTRIES  =  d2  CASTOUTS=  c1

Explanation:  This  is  the  fourth  of  five  messages  containing group  statistics,  displayed  as  a  result  of  the  DISPLAY GROUPBUFFERPOOL  command  with  the  GDETAIL  option.  It is  always  preceded  by  messages  DSNB784I  through DSNB786I  and  followed  by  message  DSNB788I.  It  lists  the statistics  on  reclaims  and  castouts  for  the  group  buffer  pool. The  associated  group  buffer  pool  is  identified  in  a  preceding DSNB750I  or  DSNB751I  message.  This  message  is  always  preceded  by messages  DSNB784I  through  DSNB787I.

d1  "Directory  entry  reclaim"  counter.  Number  of  times  a name  assignment  required  that  a  directory  entry  be reclaimed  by  the  coupling  facility.

d2  "Data  entry  reclaim"  counter.  Number  of  times  a  name assignment  required  that  a  data  page  be  reclaimed  by the  coupling  facility.

c1  "Castout"  counter.  Number  of  castout  operations  performed.

For  information  about  the  Group  Detail  Report,  see  DB2  Data Sharing:  Planning  and  Administration.

DSNB788I  CROSS  INVALIDATIONS  DUE  TO  DIRECTORY  RECLAIMS  =  x1  DUE  TO  WRITES  =  x2  EXPLICIT  =  x3

Explanation:  This  is  the  last  of  five  messages  containing group  statistics,  displayed  as  a  result  of  the  DISPLAY GROUPBUFFERPOOL  command  with  the  GDETAIL  option.  It lists  the  cross-invalidations  (XI)  statistics  for  the  group  buffer pool.  The  associated  group  buffer  pool  is  identified  in  a pre- ceding  DSNB750I  or  DSNB751I  message.  This  message  is always  preceded  by  messages  DSNB784I  through  DSNB787I.

x1  "XI  for  directory  reclaim"  counter.  Number  of  times  a directory  entry  was  reclaimed  (stolen)  and  XI  signals  had to  be  sent  (that  is,  the  stolen  directory  entry  had  regist- ered  DB2  interest).

x2  "XI  for  write"  counter.  Number  of  times  a  coupling  facility write  request  caused  XI  to  one  or  more  registered  DB2s.

x3  "XI  for  explicit  invalidation"  counter.  Number  of  times  an explicit  coupling  facility  XI  request  caused  XI  to  one  or more  registered  DB2s.

For  more  information  about  these  counters,  see  DB2  Data Sharing:  Planning  and  Administration.

DSNB789I  REGISTER  PAGE  LIST  =  r7  RETRIEVE  CHANGED  PAGES  =  r8  RETRIEVE  CLEAN  PAGES  =  r9  FAILED  READS  DUE  TO  LACK  OF  STORAGE  =  r10

Explanation:  This  is  the  fourth  of  eight  messages  containing local  statistics,  displayed  as  a  result  of  the  DISPLAY GROUPBUFFERPOOL  command  with  the  MDETAIL  option.  It lists  more  local  read  statistics  for  the  group  buffer  pool.  A pre- ceding  DSNB750I  or  DSNB751I  message  identifies  the  associated  group  buffer  pool.

The  counter  descriptions  are  listed  below.

r7  The  number  of  requests  to  the  coupling  facility  to  register interest  in  a  list  of  pages.  DB2  does  this  when  prefetch (sequential  or  list)  is  used  when  the  following  conditions  are met:

- The  DB2  member  is  running  on  a  particular  service level  of  MVS  5.2  or  above.
- The  GBP  is  allocated  in  a  coupling  facility  with CFLEVEL=2  or  above.

r8  Coupling  facility  read  requests  done  for  prefetch  to retrieve  a  page  marked  as  "changed"  in  the  group  buffer pool  as  a  result  of  feedback  from  the  request  to  register a  list  of  pages.

r9  Coupling  facility  read  requests  done  for  prefetch  to retrieve  a  page  marked  as  "clean"  in  the  group  buffer pool  as  a  result  of  feedback  from  the  request  to  register a  list  of  pages.

r10  Coupling  facility  read  requests  in  which  a  directory entry  was  not  created  because  of  a  lack  of  storage  in  the group  buffer  pool.

DSNB790I  DISPLAY  FOR  GROUP  BUFFER  POOL
gbpname  IS  COMPLETE

Explanation:  For  a  DISPLAY  GROUPBUFFERPOOL command,  this  message  signals  the  end  of  the  display for  group  buffer  pool  gbpname.

DSNB791I  THIS  DB2  IS  NOT  CONNECTED  TO  gbpname

Explanation:  This  message  is  issued  in  response  to  a DISPLAY  GROUPBUFFERPOOL  command  with TYPE(MCONN)  and  either  one  name  or  a  list  of  names  speci- fied  in  the  selection  list.  The  DB2  on  which  the  DISPLAY GROUPBUFFERPOOL  command  was  issued  is  not  currently connected  to  the  specified  group  buffer  pool.  This  message is  issued  once  for  each  group  buffer  pool  that  does  not  match the  "member  connectivity"  criterion.
System Action: The display is terminated for this group buffer pool. Command processing continues, if there are other group buffer pool names to process.

**DSNB792I**

NO DB2 IN THE GROUP IS CONNECTED TO \(gbpname\)

Explanation: This message is issued in response to a DISPLAY GROUPBUFFERPOOL command with TYPE(GCONN) and either one name or a list of names specified in the selection list. No DB2 in the group is currently connected to the specified group buffer pool. This message is issued once for each group buffer pool that does not match the "group connectivity" criterion.

System Action: The display is terminated for this group buffer pool. Command processing continues, if there are other group buffer pool names to process.

**DSNB793I**

DELETE NAME LIST = \(s5\) READ CASTOUT STATISTICS = \(s6\) DELETE NAME = \(s7\) OTHER ASYNCHRONOUS GBP REQUESTS = \(s8\)

Explanation: This message is displayed as a result of the DISPLAY GROUPBUFFERPOOL command with the MDETAIL option if the group buffer pool is duplexed. It lists the statistics on requests to the secondary group buffer pool that are related to castout processing and to garbage collection processing.

\(s5\) The number of Delete Name List requests to delete a set of pages from the secondary group buffer pool that have just been cast out from the primary. If the group buffer pool has been duplexed for the entire reporting interval, then this number should be roughly equal to the number of Unlock Castout requests to the primary (indicated in message DSNB796I).

\(s6\) The number of Read Castout Statistics requests to check for "orphaned data entries" in the secondary group buffer pool. The DB2 member that is the group buffer pool structure owner periodically issues these requests to determine whether garbage collection is necessary to clean up orphaned data entries from the secondary. Orphaned data entries are "changed" data entries in the secondary group buffer pool without a corresponding "changed" data entry in the primary. Orphaned data entries are to be expected from time to time and do not represent any kind of data inconsistency problem (because the page has already been cast out from the primary and such that the version of the page in the secondary is the same as the version of the page on DASD). Orphaned data entries can be introduced by certain transaction or system failures, or by new group buffer pool write activity that encounters very unlikely timing windows when castout is concurrently processing.

\(s7\) The number of Delete Name requests to delete "orphaned data entries" from the secondary group buffer pool. The DB2 member that is the group buffer pool structure owner issues these requests if it determines that garbage collection is necessary. See the description above under \(s6\) for a description of "orphaned data entries".

\(s8\) The number of asynchronous CF requests sent to the secondary group buffer pool. This excludes ASYNCHRONOUS COMPLETION CHECKS as reported on the DSNB764I message.

**DSNB794I**

THIS DB2 IS NOT CONNECTED TO ANY GROUP BUFFER POOL

Explanation: This message is issued in response to a DISPLAY GROUPBUFFERPOOL command with the TYPE(MCONN) option and an asterisk (*) specified as the selection list. This message is issued when DB2 determines that there are no group buffer pools having "member connectivity" from the DB2 on which the DISPLAY GROUPBUFFERPOOL command was issued.

System Action: Command processing is terminated.

**DSNB795I**

NO DB2 IN THE GROUP IS CONNECTED TO ANY GROUP BUFFER POOL

Explanation: This message is issued in response to a DISPLAY GROUPBUFFERPOOL command with the TYPE(GCONN) option and an asterisk (*) specified as the selection list. When DB2 successfully determines (that is, no error is encountered during command processing) that there are no group buffer pools connected to any DB2 in the data sharing group.

System Action: Command processing is terminated.

**DSNB796I**

CASTOUTS PAGES CAST OUT = \(c1\) UNLOCK CASTOUT = \(c2\) READ CASTOUT CLASS = \(c3\) READ CASTOUT STATISTICS = \(c4\) READ DIRECTORY INFO = \(c5\)

Explanation: This is the eighth of ten messages containing local statistics, displayed as a result of the DISPLAY GROUPBUFFERPOOL command with the MDETAIL option. It lists local castout statistics for the group buffer pool. A preceding DSNB750I or DSNB751I message identifies the associated group buffer pool. This message is always preceded by messages DSNB773I through DSNB775I, DSNB789I, DSNB776I through DSNB778I, and followed by messages DSNB779I and DSNB797I.

Counters:

\(c1\) Number of pages cast out.

\(c2\) Number of requests to unlock for castout.

\(c3\) Number of read castout class requests.

\(c4\) Number of read castout statistics requests.

\(c5\) Number of read directory info requests. These requests are made during group buffer pool checkpoint.

**DSNB797I**

OTHER INTERACTIONS REGISTER PAGE = \(o1\) UNREGISTER PAGE = \(o2\) DELETE NAME = \(o3\)

READ STORAGE STATISTICS = \(o4\) EXPLICIT CROSS INVALIDATIONS = \(o5\) ASYNCHRONOUS GBP REQUESTS = \(o6\)

Explanation: This is the last of ten messages containing local statistics, displayed as a result of the DISPLAY GROUPBUFFERPOOL command with the MDETAIL option. It lists local castout statistics for the group buffer pool. A preceding DSNB750I or DSNB751I message identifies the associated group buffer pool. This message is always preceded by messages DSNB773I through DSNB775I, DSNB789I, DSNB776I through DSNB778I, and followed by messages DSNB779I and DSNB797I.

Counters:
Number of requests to the coupling facility to register interest in a single page.

Number of requests to the coupling facility to remove the registered interest in a single page.

Number of requests to the coupling facility to delete the directory entries associated with a set of pages.

Number of requests to the coupling facility to read the statistics counters associated with the structure. DB2 generally issues this request once per group buffer pool checkpoint, and once per GDETAIL request on the DB2 DISPLAY GROUPBUFFERPOOL command.

Number of explicit cross-invalidations for pages in the group buffer pool.

Number of coupling facility requests to the primary group buffer pool that were converted from synchronous to asynchronous.

**Explanation:** This message is displayed in response to the DISPLAY GROUPBUFFERPOOL command. It is issued only if DB2 determines, by successfully querying the MVS CFRM policy, that the group buffer pool is allocated. It is immediately preceded by message DSNB759I. A preceding DSNB750I message identifies the associated group buffer pool.

**timestamp** The date and time of the last group buffer pool checkpoint.

**lrsn1** The recovery log record sequence number (LRSN) that was recorded by the last group buffer pool checkpoint that reflects the oldest changed page clean-to-dirty LRSN value at the time of the checkpoint. If the group buffer pool were to fail, **lrsn1** is used by DB2 as input to determine the starting points for the merged log scan to recover the page sets and partitions that are entered into group buffer pool recovery pending (GRECP) status. You can do more detailed monitoring of the group buffer pool checkpoint processing with IFCID 0261.

**lrsn2** The minimum member-level write-pending (restart/redo) LRSN that was recorded by the last group buffer pool checkpoint.

**Explanation:** For a DISPLAY GROUPBUFFERPOOL command, this message gives the attributes of the secondary group buffer pool if the group buffer pool is duplexed. It is displayed only if the group buffer pool is duplexed and if DB2 was successful in querying the MVS CFRM administrative policy. This message is not displayed if the group buffer pool is in a transition state between simplexing and duplexing.

**size** The actual allocated size (in kilobytes) of the secondary group buffer pool coupling facility structure.

**svolstat** The volatility status of the secondary group buffer pool:

VOLATILE The structure is volatile.

NON-VOLATILE The structure is non-volatile.

**sdir#** Actual number of directory entries allocated for the secondary group buffer pool.

**sdata#** Actual number of data pages allocated for the secondary group buffer pool.

**cfname** The name of the coupling facility in which the secondary group buffer pool is allocated.

**clevel** The coupling facility level for the coupling facility in which the secondary group buffer pool is allocated.

The member name of the group buffer pool structure owner. The structure owner’s responsibilities include the following:

- Issue the group buffer pool checkpoint.
- Detect the GBPOOLT castout threshold and initiate castout if this threshold has been reached (by notifying the pageset or partition castout owners).
- Coordinate the damage assessment process in case the group buffer pool fails.
- Coordinate the rebuild process for the group buffer pool.

‘UNKNOWN’ is displayed if DB2 is not able to determine which member is the structure owner for the group buffer pool. This should only happen in an unexpected error situation. See the message accompanying that error.

**System Action:** Processing continues.
**DSNB800I**  DIRECTORY ENTRY TO DATA PAGE RATIO SET TO value FOR gbnname. IT WILL TAKE EFFECT ON THE NEXT REALLOCATION.

**Explanation:** This message is issued in response to an ALTER GROUPBUFFERPOOL command that requests a change to the directory entry to the data page ratio for a group buffer pool. It is also issued for the first ALTER GROUPBUFFERPOOL command for a group buffer pool, even when no ratio value is specified on the command (in this case, the default ratio value is being used). The new ratio takes effect the next time the coupling facility cache structure is allocated. The directory entry to data page ratio determines the number of directory entries and the number of data pages that are allocated in the coupling facility cache structure for the group buffer pool. If the coupling facility structure is not allocated, the first connect from any DB2 causes allocation of the structure and the new directory entry to data page ratio to take effect.

If the structure size can be determined from the MVS CFRM administrative policy, message DSNB801I is issued to indicate an estimate of the number of directory and data entries that are allocated based on the new ratio and the current size of the coupling facility structure. Otherwise, message DSNB812I is issued.

**System Action:** Processing continues.

**System Programmer Response:** Use the -DISPLAY GROUPBUFFERPOOL command to display the number of allocated directory and data entries.

**DSNB801I**  MAX STRUCTURE SIZE INDICATED IN MVS CFRM POLICY = size KB ESTIMATED NUMBER OF DIRECTORY ENTRIES = dir# ESTIMATED NUMBER OF DATA PAGES = data#

**Explanation:** This message is issued in response to an ALTER GROUPBUFFERPOOL command after the directory entry to data page ratio is successfully updated. It is also issued for the first ALTER GROUPBUFFERPOOL command for a group buffer pool, even when no ratio value is specified on the command (in this case, the default ratio value is used). The group buffer pool is identified in message DSNB800I, which immediately precedes this message.

Because the actual ratio change does not take affect until the group buffer pool is reallocated, this message shows the estimated number of directory entries and data pages that are allocated based on the new ratio and the maximum size of the coupling facility structure, as indicated in the active CFRM policy definition. The actual number of entries that are allocated varies based on the amount of coupling facility storage that is available at the time the allocation is attempted, and on the amount of storage overhead necessary for the coupling facility control structures. Because DB2 cannot determine these variables, the estimated number of directory and data entries displayed in this message assumes that the entire storage allocation for the coupling facility cache structure will be used for directory and data entries, which is not the case.

To determine the actual number of directory and data entries that are allocated for this group buffer pool, you must cause the buffer pool to be reallocated or rebuilt, as described in DB2 Processing continues.

**System Programmer Response:** Reissue the -DISPLAY GROUPBUFFERPOOL command.

**DSNB803I**  RATIO IS TRUNCATED TO value

**Explanation:** The precision specified on the RATIO parameter on an ALTER GROUPBUFFERPOOL command was greater than allowed. For decimal numbers less than 25, any digits after the first decimal place are ignored: for example, 5.67 is treated as 5.6. For decimal numbers greater than or equal to 25, any digits after the decimal point are ignored: for example, 25.3 is treated as 25.

**System Action:** Processing continues.

**DSNB804I**  CLASS CASTOUT THRESHOLD SET TO value% FOR gbnname

**Explanation:** An illegal value was specified on the CLASST (class castout threshold) keyword on an ALTER GROUPBUFFERPOOL command. The CLASST value must be an integer between 0 and 90, inclusive.

**System Action:** The request is rejected.

**System Programmer Response:** Reissue the -ALTER GROUPBUFFERPOOL command, specifying an acceptable value for CLASST.

**DSNB805I**  value IS NOT A VALID PARAMETER FOR ‘CLASST’

**Explanation:** This message is issued in response to an ALTER GROUPBUFFERPOOL command that requests a change to the class castout threshold value for a group buffer pool. It is also issued for the first ALTER GROUPBUFFERPOOL command for a group buffer pool, even when no threshold value is specified on the command (in this case, the default class castout threshold value is being used).

**System Action:** Processing continues.

**DSNB806I**  GROUP BUFFER POOL CASTOUT THRESHOLD SET TO value% FOR gbnname

**Explanation:** This message is issued in response to an ALTER GROUPBUFFERPOOL command that successfully changes the group buffer pool castout threshold value for a group buffer pool. It is also issued for the first successful ALTER GROUPBUFFERPOOL command for a group buffer pool, even when no threshold value is specified on the command (in this case, the default group buffer pool castout threshold value is being used).

**System Action:** Processing continues.

**DSNB807I**  value IS NOT A VALID PARAMETER FOR ‘GBPOOLT’

**Explanation:** An ALTER GROUPBUFFERPOOL command was issued with an illegal value specified on the GBPOOLT (group buffer pool castout threshold) keyword. The GBPOOLT value must be an integer between 0 and 90, inclusive.

**System Action:** The request is rejected.

**System Programmer Response:** Reissue the -ALTER GROUPBUFFERPOOL command, specifying an acceptable value for GBPOOLT.
DSNB808I  GROUP BUFFER POOL CHECKPOINT
INTERVAL SET TO value MINUTES FOR
gbnname

Explanation: This message is issued in response to an
ALTER GROUPBUFFERPOOL command that successfully
changes the group buffer pool checkpoint interval value for a
group buffer pool. It is also issued for the first successful
ALTER GROUPBUFFERPOOL command for a group buffer
pool, even when no interval value is specified on the command
(in this case, the default group buffer pool checkpoint interval
value is being used).

System Action: Processing continues.

DSNB809I  value IS NOT A VALID PARAMETER FOR
'GBPCHKPT'

Explanation: An ALTER GROUPBUFFERPOOL command
was issued with an illegal value specified on the GBPCHKPT
(group buffer pool checkpoint) keyword. The GBPCHKPT value
must be an integer between 1 and 999999, inclusive.

System Action: The request is rejected.

System Programmer Response: Reissue the -ALTER
GROUPBUFFERPOOL command, specifying an acceptable
value for GBPCHKPT.

DSNB812I  SIZE ESTIMATES ARE NOT AVAILABLE FOR
THE GROUP BUFFER POOL MVS IXQUERY
RETURN CODE = return code MVS IXQUERY
REASON CODE = reason code

Explanation: The directory entries and data pages estimates
for the group buffer pool, identified on the preceding DSNB800I
message, could not be computed because IXQUERY was
unable to obtain the backing structure's size information from
the MVS CFIM administrative policy definition. This can
happen if an IXQUERY processing error occurred, or if the
structure was not defined in the CFIM policy. The backing
structure for the group buffer pool must be defined in the
CFIM policy before the group buffer pool can be allocated.
The exact reason can be determined from the return code and
the reason code. For an explanation of the IXQUERY codes,
see MVS/ESA Programming: Sysplex Services Reference.

System Action: The command completes successfully, but
without giving the estimates.

DSNB813I  csect-name ALTER NOTIFICATION FAILED

Explanation: An ALTER GROUPBUFFERPOOL command
failed to propagate the request for castout threshold or check-
point interval change to other DB2s in the data sharing group.
This error is triggered by an error encountered by the IRLM
notification process. As a result, different DB2s in the group
might have different values for the castout threshold or check-
point interval. The RATIO change does not use the notification
process and is, therefore, not affected by such a failure.

System Action: Processing continues.

System Programmer Response: Reissue the -ALTER
GROUPBUFFERPOOL command with the same parameters. If
the problem persists, it indicates a deeper problem, such as
inadequate space for the locking structures.

DSNB814I  csect-name NO CHANGES REQUESTED ON
COMMAND

Explanation: An ALTER GROUPBUFFERPOOL command
without any parameters was issued for an existing group buffer
pool. If an ALTER GROUPBUFFERPOOL command without
any parameters is issued for a group buffer pool that does not
yet exist, a group buffer pool definition with default parameters
values is created.

System Action: The command is successful and processing
continues.

DSNB890I  command-verb gbp-kwd COMMAND IS ONLY
VALID FOR DATA SHARING

Explanation: An attempt was made to issue a
GROUPBUFFERPOOL command on a DB2 that was not ini-
tialized to participate in data sharing.

command-verb The name of the command attempted:
ALTER, or DISPLAY

gbp-kwd The keyword GROUPBUFFERPOOL or
GPPOOL

System Action: The command request is rejected.

DSNB891I  name IS NOT A VALID GROUP BUFFER POOL
OR COUPLING FACILITY STRUCTURE NAME

Explanation: An invalid name was specified on an ALTER
GROUPBUFFERPOOL or DISPLAY GROUPBUFFERPOOL
command.

name Either the DB2 group buffer pool name or the
backing coupling structure name

You must either specify the DB2 group buffer pool name
(gbnname) or the backing coupling facility structure name
(strname). Acceptable values for gbnname are GBP0, GBP1,
..., GBP49, GBP32K, GBP32K1, ..., GBP32K9. The strname
has the following format:

groupname_gbnname

The groupname is the DB2 data sharing group name. The
underscore (_) is used as a delimiter between the groupname
and the gbnname.

System Action: The request is rejected.

System Programmer Response: Reissue the command
specifying a valid group buffer pool name.

DSNB892I  gbpname IS NOT A VALID GROUP NAME FOR
THIS DB2

Explanation: The group name specified as part of the full
coupling facility cache structure name on an ALTER
GROUPBUFFERPOOL or DISPLAY GROUPBUFFERPOOL
command is incorrect. On the commands, you can specify
either the correct 16-byte coupling facility cache structure
name or the DB2 group buffer pool name. The coupling facility
cache structure name is a 16-character name specified as
follows:


groupname_gbpname

The gbpname can be GBP0, GBP1, ..., GBP49 GBP32K,
GBP32K1, ..., GBP32K9. The groupname is the DB2 data
sharing group name. The underscore (_) is used as a delimeter
between the groupname and the gbpname. The coupling
facility cache structure names are left-justified with a blank as
the rightmost padding character. DB2 adds the padding blanks if they are not specified on the command.

**System Action:** The request is rejected.

**System Programmer Response:** Reissue the command, specifying a valid group buffer pool name.
DSNE... Messages

In the TSO attachment facility, the user can control whether message IDs are displayed. To see them, type PROFILE MSGID. To suppress them, type PROFILE NOMSGID.

Trace messages associated with the TSO attachment facility (including DSN and DB2) are not listed in this manual. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

All DSN command processor trace messages have the same message number: DSNET20I.

---

DSNET20I

**Explanation:** This is one of many possible trace messages bearing this message number. Complete documentation of all of the TSO attachment facility trace messages bearing this message number is found in Section 9 of DB2 Diagnosis Guide and Reference.

---

DSNE004E PROBABLE SUBSYSTEM ERROR DETECTED IN CSECT csect-name, SUBSYSTEM FUNCTION service, RETCODE retcode, REASON CODE reason-code

**Explanation:** A subsystem error has occurred. The function identified in the message as 'service' is either an MVS or a DB2 service routine. The error was discovered in the 'csect-name' indicated in the message. Refer to the appropriate MVS publications for a description of the return and reason codes.

**System Action:** This message is sometimes followed by an intentional system abend. In other instances, the DSN command processor will terminate the current subcommand and attempt to continue by issuing another DSN prompt.

**User Response:** Run the job again with a SYSUDUMP dump data set allocated and DSN tracing set to 123. Collect the DSN trace stream. If an abend occurs, collect the dump.

---

DSNE005A EXECUTION IS INTERRUPTED. ENTER C TO CANCEL, OR ANY OTHER REPLY TO RESUME THE subcmd SUBCOMMAND

**Explanation:** The Attention key was pressed. Entering a 'C' will cancel the DSN subcommand that is currently executing. If the user enters a question mark, message DSNE006A will appear. Any other reply will cause execution of the subcommand that was in progress to continue.

**System Action:** This message is sometimes followed by an intentional system abend. In other instances, the DSN command processor will terminate the current subcommand and attempt to continue by issuing another DSN prompt.

**User Response:** Enter a 'C' to cancel the DB2 subcommand currently executing. The DSN prompt will appear on the terminal. Enter anything else (except another attention) to resume execution.

---

DSNE006A C WILL TERMINATE THE SUBCOMMAND WITH UNCOMMITTED CHANGES BACKED OUT

**Explanation:** Enter a 'C' to terminate the subcommand. No uncommitted changes are made to the database. Any other reply causes subcommand execution to continue.

**User Response:** Enter a 'C' to terminate the subcommand. Control returns to DSN, and the DSN prompt appears on the terminal. This is a second-level help message associated with message DSNE005A.

---

DSNE008I REPLY WAS xxxxx, EXECUTION RESUMED

**Explanation:** Execution was suspended by a user ATTENTION and then was resumed, because the string specified in the message as 'xxxxx' was entered.

**System Action:** Control returns to the interrupted session.

---

DSNE009I REPLY WAS C, EXECUTION TERMINATED

**Explanation:** The response to message DSNE005A was a C. This caused the current subcommand to terminate.

**System Action:** The current subcommand is terminated. The DSN prompt appears on the terminal.

**User Response:** You can now enter another DSN subcommand.

---

DSNE010I SUBCOMMAND subcmd CANCELED BY ATTENTION

**Explanation:** The subcommand specified in the messages was canceled because the user pressed the attention key and then entered a 'C'.

**System Action:** The current subcommand is terminated. The DSN prompt appears on the terminal.

**User Response:** A new subcommand can be entered.

---

DSNE011I DSN COMMAND CANCELED BY ATTENTION

**Explanation:** The user of the DSN command processor has pressed attention. Since this occurred before DSN was fully initialized, DSN terminates. If DSN had been fully initialized, it would have prompted the user to continue or cancel.

**System Action:** The DSN command processor terminates. Control returns to TSO or the calling CLIST.

**User Response:** Restart DSN.

---

DSNE05A ssid NOT OPERATIONAL, RETRY COUNT IS ZERO

**Explanation:** The subsystem (specified in the message as 'ssid') was not active, and no retries remain to be executed. No more connection attempts are made. The operator should be notified to start this specific subsystem, and the DSN command should be resubmitted. Issue the DSN command with the RETRY parameter set greater than zero.
System Action: Control returns to TSO.

User Response: Notify the operator to start the subsystem.

Operator Response: Start the subsystem with the 'ssid' specified in the message.

**DSNE101I**  ssid NOT OPERATIONAL, WILL RETRY nnn MORE TIMES

Explanation: The requested DB2 subsystem 'ssid' was not started or is not available. Connection to it will be attempted 'nnn' more times. This message is issued every 30 seconds (and each time 'nnn' is decreased by 1) until the connection is made or 'nnn' is zero.

System Action: DSN repeats the connection attempt until the connection is made or until the retry count is decreased to zero.

User Response: Notify the operator start DB2.

**DSNE102I** YOU ARE NOT AUTHORIZED TO USE DB2 SUBSYSTEM ssid

Explanation: The authorization ID is not authorized to use subsystem 'ssid'.

System Action: Control returns to TSO.

User Response: Contact the system programmer, or system administrator to arrange for the required RACF or equivalent security system authorization.

**DSNE103E** MAIN STORAGE REQUEST FROM csect-id FAILED

Explanation: A request for main storage failed.

System Action: The TSO attachment facility is ready for more input.

User Response: Increase the address space size. This can be done as part of the logging on process.

**DSNE104E** RETRY COUNT OF number NOT VALID, SET TO 120

Explanation: An invalid 'RETRY' parameter was entered on the DSN command. It has been set to 120. Valid retry counts are integer numbers from 0 to 120.

System Action: Retry count is modified, and DSN execution continues.

User Response: The next time you invoke DSN, use a RETRY count of 0 to 120.

**DSNE105E** SUBSYSTEM ssid NO LONGER OPERATIONAL

Explanation: The DB2 subsystem is down. It must be restarted before the user can continue.

System Action: Control returns to TSO attachment facility.

User Response: Before you can continue, DB2 must be restarted. You must also reissue the DSN command. ISPF users should restart their jobs.

**DSNE106E** PLAN plan-id NOT AUTHORIZED FOR SUBSYSTEM ssid AND AUTH-ID auth-id

Explanation: The requested combination of plan-id, subsystem-id, and user-id is not currently authorized.

System Action: The TSO attachment facility is ready for more input.

User Response: Notify the system programmer or system administrator to obtain proper authorization.

System Programmer Response: The system administrator for the DB2 subsystem can arrange the necessary authorization.

**DSNE107E** SUBSYSTEM RESOURCE NEEDED FOR PLAN plan-name, AUTH ID auth-id, AND SUBSYSTEM subsys IS NOT AVAILABLE

Explanation: The DB2 subsystem was unable to allocate a necessary resource for the requested combination of plan-id, user-id, and subsystem-id. This message is accompanied by DSNE108E. An attempt to establish connection with the DB2 subsystem has failed.

System Action: The TSO attachment facility is ready for more input.

User Response: Arrange to obtain the needed resource, and resubmit the subcommand. See the explanation for message DSNE108E, which accompanies this message.

**DSNE108E** FEEDBACK - REASON CODE reason-code TYPE= type RESOURCE NAME - 44 characters

Explanation: This message accompanies message DSNE107E or DSNE114E to explain the problem more clearly. RESOURCE NAME is the name of the unavailable resource. The reason code is in hexadecimal format.

System Action: The TSO attachment facility is ready for more input.

User Response: Arrange for the missing resource to be available, and resubmit your job.

Problem Determination: The reason the resource is unavailable is identified by a reason code. The reason codes that appear in this message are described in "Section 4. DB2 Codes" on page 577. TYPE and RESOURCE NAME identify the resource that is currently unavailable. The TYPE code identifies the type, as well as the format and content, of the RESOURCE NAME. Refer to Table 3 in Appendix B, "Problem determination" on page 1051 for an explanation of resource type codes.

**DSNE109E** NO INPUT TO BIND, SUBCOMMAND TERMINATED

Explanation: No LIBRARY parameter was specified on the BIND subcommand. No DBRMLIB was allocated.

System Action: The TSO attachment facility is ready for more input.

User Response: Specify the LIBRARY parameter, and resubmit the BIND subcommand. Alternatively, you could issue an ALLOCATE command for the DDNAME DBRMLIB and then resubmit the BIND subcommand as originally written.
**DSNE110E** ssid NOT VALID SUBSYSTEM ID, COMMAND TERMINATED

**Explanation:** There is no subsystem id with the name identified in the message as 'ssid'. The subsystem identifier you specify (or default to) on the DSN command must exist. This message is the result of specifying (or defaulting to) a nonexistent subsystem identifier. For information on the SYSTEM parameter of the DSN command, refer to DB2 Command Reference.

**System Action:** The DSN processor ends, and control returns to TSO.

**User Response:** Reissue the command with a valid SYSTEM parameter.

**DSNE111E** INSTALLATION EXIT REJECTED DSNAME data-set-name

**Explanation:** A local installation-supplied exit has rejected the data set name identified in the message as 'data-set-name'.

**System Action:** The TSO attachment facility is ready for more input.

**User Response:** Either correct the data set name specified, or arrange to authorize the original data set name. Resubmit the request.

**DSNE112E** userid STILL SIGNED ON TO SUBSYSTEM ssid

**Explanation:** An attempt was made to sign on to DB2 when the user was already signed on.

**System Action:** Control returns to TSO.

**User Response:** Log off and log on again.

**DSNE113E** NOT ABLE TO LINK TO MODULE modname IN DSNAME data-set-name

**Explanation:** A DB2 subsystem error occurred during an attempt to link to module 'modname' in data set 'data-set-name'.

**System Action:** The TSO attachment facility is ready for more input.

**User Response:** Check that the module exists and that its name is spelled correctly. Enter the correct module name.

**DSNE114E** THE COMBINATION OF PLAN planid, AUTH ID auth-id, AND SUBSYSTEM ssid IS NOT VALID

**Explanation:** The resource in message DSNE108E, which will follow this message, is not a valid resource name.

**System Action:** The TSO attachment facility is ready for more input.

**User Response:** Correct the invalid combination, and resubmit the subcommand. The problem is probably caused by a user spelling error. If it is not, check with the system administrator to determine the availability of the needed resource. Your program may need to be bound. See the explanation for message DSNE108 (which accompanies this one) for more information.

**DSNE117E** NOT ABLE TO LOCATE membername IN DSNAME data-set-name

**Explanation:** The 'data-set-name' specified does not contain the member the user wanted to run.

**System Action:** Control remains with the DSN command processor, and the DSN prompt appears on the terminal. The DSN command processor is ready for another command.

**User Response:** Correct the PROGRAM or LIBRARY parameter, and resubmit the subcommand.

**DSNE118E** invalid-command NOT VALID COMMAND

**Explanation:** The user entered an invalid command. A typing error may be responsible. You may be trying to run a command processor that is either not available on your system or that is not part of your current LNKLST or STEPLIB concatenation.

**System Action:** The TSO attachment facility is ready for more input.

**User Response:** Either correct the spelling error, or rearrange your library concatenation so that you can access the required command processor. Resubmit the command.

**DSNE119E** data-set-name NOT PARTITIONED DATA SET

**Explanation:** The user tried to allocate a sequential data set when a partitioned data set was required.

**System Action:** The TSO attachment facility is ready for more input.

**User Response:** Check the data-set-name. The data set you specified is sequential, but you specified a member name. Remove the member name, and resubmit the job.

**DSNE120E** data-set-name NOT SEQUENTIAL DATA SET

**Explanation:** The user tried to allocate a partitioned data set when a sequential data set was required.

This message is issued by the following CSECT: DSNECP69

**System Action:** The TSO attachment facility is ready for more input.

**User Response:** Check the data-set-name. The data set you specified is partitioned, but you did not specify a member name. Add a member name, and resubmit the job.

**DSNE121E** csect-id NOT ABLE TO OPEN DATA SET

**Explanation:** The DB2 subsystem was unable to open the requested data set.

This message is issued by the following CSECTs: DSNECP23, DSNECP69

**System Action:** The TSO attachment facility is ready for more input.

**User Response:** For information about why the data set could not be opened, read the explanations of the messages that accompany this message. Correct the condition, and resubmit the job.
**DSNE122E** DATA SET ORGANIZATION MUST BE EITHER SEQUENTIAL OR PARTITIONED. data-set-name IS NOT

**Explanation:** The DB2 subsystem was unable to open data set 'data-set-name', because it is not a sequential or partitioned data set.

**System Action:** The TSO attachment facility is ready for more input.

**User Response:** Correct the data-set-name, or change the data set organization. Resubmit the job.

**DSNE123I** data-set-name NOT PARTITIONED DATA SET, IT IS IGNORED

**Explanation:** The data-set-name in the message is required to be partitioned. It is not and, consequently, was ignored.

**System Action:** DSN will attempt to continue BIND processing.

**User Response:** Correct the subcommand, and resubmit it.

**DSNE124E** DATA SET data-set-name, MEMBER member-name IN USE, TRY LATER

**Explanation:** The member contained in 'data-set-name' is currently in use. This message is normally issued when another user is updating the specified member.

**System Action:** The TSO attachment facility is ready for more input.

**User Response:** Wait until the member is available and reissue your DCLGEN request.

**DSNE125E** DATA SET data-set-name IN USE, TRY LATER

**Explanation:** The sequential data set 'data-set-name' is currently in use. This message is normally issued when another user is updating the specified data set.

**System Action:** The TSO attachment facility is ready for more input.

**User Response:** Wait until the data set is available and reissue your DCLGEN request.

**DSNE126E** THE DB2 OPERATOR IS STOPPING THE SUBSYSTEM. PLEASE END YOUR DSN SESSION

**Explanation:** The operator has requested that DB2 quiesce. The user should promptly finish the current task and terminate the DSN session so that this can take place. This message may be followed by message DSNE127l.

**System Action:** No new users will be permitted to initiate DB2 sessions. Current users will be permitted to work until they terminate their connections to DB2.

**User Response:** End your DSN session as soon as possible.

**DSNE127I** THE DB2 OPERATOR IS STOPPING THE SUBSYSTEM. DSN IS TERMINATING

**Explanation:** The operator has requested that DB2 terminate.

**System Action:** DB2 will shut down, interrupting user activities as necessary. DSN will terminate immediately and return the user to TSO.

**User Response:** Reinitiate your session when DB2 returns.

**DSNE128I** DB2 IS ABNORMALLY ENDING. DSN IS TERMINATING

**Explanation:** DB2 has encountered a problem from which it cannot recover.

**System Action:** Control returns to TSO.

**User Response:** Resubmit the DSN command when activity using DB2 has diminished. If still unsuccessful, see the system programmer about the installation parameters.

**DSNE130I** MAXIMUM NUMBER OF DB2 USERS REACHED. YOUR RETRY COUNT IS ZERO

**Explanation:** The number of concurrent connections to DB2 is restricted. The number is specified in the installation parameters in member DSN6SYSP. For TSO foreground, see parameter IDFORE. For background jobs, see parameter IDBACK. The DSN request has been denied, because the current number of DB2 connections in the system has reached the installation-specified limit.

**System Action:** Control returns to TSO.

**User Response:** Resubmit the DSN command when activity using DB2 has diminished. If still unsuccessful, see the system programmer about the installation parameters.

**DSNE131I** MAXIMUM NUMBER OF DB2 USERS REACHED. WILL RETRY nnn MORE TIMES

**Explanation:** The number of concurrent connections to DB2 is restricted. The number is specified in the installation parameters in member DSN6SYSP. For TSO foreground, see parameter IDFORE. For background jobs, see parameter IDBACK. The DSN request was denied because the current number of DB2 connections in the system reached the installation-specified limit.

The DSN connection to DB2 is attempted 'nnn' more times. The number of retries is determined by the RETRY parameter on the DSN command. For more information, refer to DB2 Command Reference.

This message is issued every 30 seconds (and each time 'nnn' is decreased by 1) until the connection is made or until 'nnn' is decreased to zero.

**System Action:** DSN repeats the connection attempt until the connection is made or the retry count is decreased to 0.

**User Response:** If all retry attempts fail, resubmit the DSN command when DB2 activity diminishes. If still unsuccessful, see the system programmer about the installation parameters.
### DSNE132I  DB2 IS OPERATING IN RESTRICTED ACCESS MODE. MAINTENANCE PERSONNEL ONLY

| Explanation: | DB2 is not available for normal operation. It is only available to service personnel. |
| System Action: | Control returns to the caller. Your request was not processed. The DSN command processor was unable to connect to DB2. |
| User Response: | Wait until DB2 is available for general use, then resubmit your request. |

### DSNE133E  csect-name RELEASE LEVELS NOT COMPATIBLE. DSN=release_level, DB2=release_level

| Explanation: | The DSN command processor, perhaps running under the control of DB2I, has detected a release level incompatibility between itself and DB2. The current release_level of the DSN command processor code and the DB2 subsystem load modules is indicated as a string of three numeric characters as follows: |
| System Action: | The DSN command processor terminates. |
| User Response: | Check that your method of invoking DSN or DB2I allocates the correct libraries for DSN. If you used JCL or a TSO logon procedure to execute DSN code, check your JOBLIB and STEPLIB allocations. If you used a CLIST to execute DSN, insure that you obtained the correct version of the DSN code. See your system programmer if you invoke DSN using procedures supplied by your system programmer. |

### DSNE231A  ONE NAME IS REQUIRED TO FREE A PLAN OR A PACKAGE

| Explanation: | The user has attempted to use the FREE PLAN or PACKAGE panel without specifying a plan or package name. |
| System Action: | The TSO attachment facility is ready for more input. |
| User Response: | Enter the name of a plan or package, or (*) to indicate 'all'. |

### DSNE232A  CONNECTION NAME REQUIRES ENABLE/DISABLE OF CONNECTION TYPE

| Explanation: | The user indicated that specific connection names were to be specified for ENABLE or DISABLE, but the associated connection type field was not updated. The ENABLE or DISABLE of connection names requires the corresponding connection type to also be specified for ENABLE or DISABLE. |
| System Action: | The TSO attachment facility is ready for more input. |
| User Response: | Enter Y (Yes) on the connection type for the associated connection names. |

### DSNE233A  MEMBER NAME MUST NOT BE SPECIFIED MORE THAN ONCE

| Explanation: | The LIBRARY field containing the data set name, also contains a member name. |
| System Action: | The TSO attachment facility is ready for more input. |
| User Response: | The member name must be specified only once, and must be specified on the MEMBER field. |

### DSNE234A  EITHER DBRM MEMBER OR INCLUDE PACKAGE LIST MUST BE SPECIFIED

| Explanation: | The BIND PLAN subcommand requires either a DBRM member name or a package list as input, neither was specified. |
| System Action: | The TSO attachment facility is ready for more input. |
| User Response: | Enter a DBRM member name(s), or specify that a package list is to be included. Both options are also allowed. |

### DSNE235A  plan/package NAME IS A DUPLICATE OF PRIMARY plan/package NAME

| Explanation: | In addition to the primary 'plan' or 'package' name specified on the REBIND or FREE subcommand panel, the user also specified that additional plans or packages were to be included in the list. The primary 'plan' or 'package' name was again specified to be included in the list. |
| System Action: | The duplicate of the primary 'plan' or 'package' name is automatically deleted from the list to avoid errors during subcommand processing. The TSO attachment facility is ready for more input. |
| User Response: | Complete the list of additional plans or packages. |

### DSNE236A  SPECIFY A CONNECTION TYPE TO ENABLE OR DISABLE

| Explanation: | The user indicated that individual connection types were to be ENABLED or DISABLED, but no specific connection types were specified. |
| System Action: | The TSO attachment facility is ready for more input. |
| User Response: | Enter Y (YES) for each individual connection type to ENABLE, or DISABLE. |
DSNE237A  SPECIFY ENABLE ALL OR SPECIFIC CONNECTION TYPES

Explanation: In addition to requesting that all connection types be enabled, the user also requested that specific connection types be enabled. The enable of all connection types includes the enable of specific connection types.

System Action: The TSO attachment facility is ready for more input.

User Response: Specify specific connection types to be enabled, or specify that all connection types are to be enabled.

DSNE240A  ISPF RETURNED AN UNEXPECTED CODE WHILE CLOSING A TABLE

Explanation: An ISPF error return code was encountered when attempting to perform a TBCLOSE for an ISPF table while processing the current subcommand panel.

System Action: TSO processing for the current subcommand is terminated.

User Response: Notify the system programmer.

System Programmer Response: Verify that the ISPF table library allocated to the DSNETBLS DD statement has sufficient space or directory entries available. Also refer to the ISPF error log for additional diagnostic information.

DSNE241A  INTERNAL PROCEDURE WAS PASSED AN INVALID NUMBER OF ARGUMENTS

Explanation: A TSO Interpreter error was encountered while executing a subroutine during the processing of the current subcommand.

System Action: TSO processing for the current subcommand is terminated.

User Response: Notify the system programmer.

System Programmer Response: Notify the IBM support center that an error was encountered in the TSO SYSCALL instruction.

Problem Determination: The TSO SYSCALL instruction is not passing all the parameters to a subroutine defined within the CLIST.

DSNE242A  ISPF RETURNED AN UNEXPECTED CODE WHILE SETTING SEARCH ARGUMENTS

Explanation: An ISPF table for the current function does not contain the expected column or table format.

System Action: TSO processing for the current subcommand is terminated.

User Response: Notify the system programmer.

System Programmer Response: Verify that the ISPF table library allocated to the DSNETBLS DD statement has sufficient space and directory entries available. Also refer to the ISPF error log for additional diagnostic information.

DSNE243A  ISPF RETURNED AN UNEXPECTED CODE DURING A TABLE DISPLAY

Explanation: An ISPF error was encountered when attempting to display a DB2I table panel.

System Action: TSO processing for the current subcommand is terminated.

User Response: Notify the system programmer.

System Programmer Response: Insure that the DB2I panel and panel library are established correctly. If the format of both is correct, then use ISPF option 7.2 to test the panel for additional errors.

Examine the ISPF error log for additional error information and determine the name of the panel to be displayed.

DSNE244A  CANNOT SAVE CREATED TABLE, VERIFY SPACE IN TABLE LIBRARY

Explanation: An ISPF TBSAVE function returned with a condition code greater than zero.

System Action: TSO processing for the current subcommand is terminated.

User Response: Notify the system programmer.

System Programmer Response: Verify that the ISPF table library allocated to the DSNETBLS DD statement has sufficient space and directory entries available. Also refer to the ISPF error log for additional diagnostic information.

DSNE245A  ISPF RETURNED AN UNEXPECTED CODE WHILE ADDING A ROW TO A TABLE

Explanation: An ISPF TBADD function returned with a condition code greater than four.

System Action: The TSO attachment facility is ready for more input.

User Response: Enter the DB2I CANCEL command, and notify the system programmer.

System Programmer Response: Verify that the user has enough memory to perform ISPF functions. Also refer to the ISPF error log for additional diagnostic information.

DSNE246A  ISPF RETURNED AN UNEXPECTED CODE WHILE DELETING A ROW

Explanation: An ISPF TBDELETE function returned with a condition code greater than zero.

System Action: TSO processing for the current subcommand is terminated.

User Response: Enter the DB2I CANCEL command, and notify the system programmer.

System Programmer Response: Verify that the user has enough memory to perform ISPF functions. Also refer to the ISPF error log for additional diagnostic information.
DSNE247A  ISPF RETURNED AN UNEXPECTED CODE
WHILE UPDATING A ROW
Explanation: An ISPF TBPUT function returned with a condition code greater than four.
System Action: TSO processing for the current subcommand is terminated.
User Response: Enter the DB2I CANCEL command, and notify the system programmer.
System Programmer Response: Verify that the user has enough memory to perform ISPF functions. Recreate the user actions that lead to the failure. Also refer to the ISPF error log for additional diagnostic information.

DSNE248A  COMMAND ENTERED CONTAINS INVALID
CHARACTERS, RESPECIFY
Explanation: The command entered at the command line contains an invalid character, the command must be reentered.
System Action: The system is waiting for new input to the panel.
User Response: Correct the invalid command entry.

DSNE250A  PLEASE ENTER THE COMMAND AT THE LINE
WITH THE PLAN/PACKAGE NAME
Explanation: SELECT or RESET commands must be entered on the line where the PLAN/PACKAGE name is shown. This line contains the name of the PLAN/PACKAGE, while the secondary line(s) do not.
System Action: The line command is rejected. The TSO attachment facility is ready for more input.
User Response: Reenter the line command on the primary PLAN/PACKAGE line(s).

DSNE252A  JCL WAS NOT CREATED, ERROR errcode
WHILE DOING function_name FUNCTION
Explanation: Error code 'errcode' was received while doing a function 'function_name', the JCL was not created.
Severity: 20
System Action: Refer to ISPF V4 Dialog Developer’s Guide and Reference for the cause of this error.
User Response: Contact your systems programmer.
Problem Determination: Use the return code/function combination to find the causes for the problem in ISPF V4 Dialog Developer’s Guide and Reference and correct the problem.
Collect the following diagnostic items listed in Appendix B “Problem determination” on page 105 for additional diagnostic information.

DSNE283A  THE , (COMMA) OPTION IS INCOMPATIBLE
WITH THE hostlang LANGUAGE
Explanation: The user tried to select the 'hostlang' APPLICATION LANGUAGE and the comma option of the DECIMAL POINT field on the DB2I defaults panel. This combination is not supported.
System Action: The defaults panel is displayed again.
User Response: Either change the APPLICATION LAN-
DSNE295A  YOU CANNOT DISPLAY AND RESTART A UTILITY AT THE SAME TIME

Explanation: You have set options on the DB2 Utilities panel that call for conflicting actions. You can either DISPLAY the status of a utility, or you can RESTART a utility, but you cannot do both.

System Action: The system is waiting for new input to the panel.

User Response: Either change the RESTART option to NO, or select a different FUNCTION.

DSNE296A  YOU CANNOT TERMINATE AND RESTART A UTILITY AT THE SAME TIME

Explanation: You have set conflicting options on the DB2 Utilities panel. You can either TERMINATE a utility, or you can RESTART a utility, but you cannot do both.

System Action: The system is waiting for new input to the panel.

User Response: Either change the RESTART option to NO, or select a different FUNCTION.

DSNE297A  ENTER DATA SET NAME: COPYDSN OR RCPYDSN1

Explanation: You have not specified a data set name for the COPY utility. A data set name for the local/current site (COPYDSN), and/or the recovery site (RCPYDSN1) is required.

System Action: The system is waiting for new input to the panel.

User Response: Enter a data set name for COPYDSN, and/or RCPYDSN1.

DSNE298A  ERROR DURING EDIT: CLIST data set name

Explanation: Errors were encountered while attempting to change the online book data set names in the DB2 CLIST member DSNEMC01. No data set names were changed.

System Action: The system is waiting for new input to the panel.

User Response: Ensure that the CLIST data set name is correct and contains the DSNEMC01 CLIST member to be changed. This CLIST data set must also be available to the TSO user ID in WRITE mode. This error will continue to be displayed on the panel until the error is resolved or the user exits the panel (END).

System Programmer Response: If you are unable to determine the problem, you can trace the DB2 CLIST execution while displaying this panel.

Problem Determination: Examine the CLIST trace output for any TSO/ISPF nonzero return codes encountered during CLIST execution.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

DSNE301I  INTERNAL ERROR – ILLEGAL TYPE IN MODULE module-name

Explanation: An internal DB2 problem has occurred. The named module has detected a nonexistent SQLTYPE.

User Response: Collect the SPUFI trace and ISPF log, and notify either the system programmer or the database administrator.

You may have to rerun the failing job after you have turned on trace. This will enable you to send trace messages to the ISPF log.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

DSNE351A  EDIT PROCESSING OPTION MUST BE Y (YES) OR N (NO)

Explanation: The user specified an edit option other than 'YES', 'NO', or the abbreviation 'Y' or 'N'. A valid user response determines whether SPUFI invokes the ISPF editor to allow the user to edit the input data set.

System Action: SPUFI will wait until the user enters a valid response.

User Response: Type in a 'Y' or an 'N', and press 'ENTER'.

DSNE352A  EXECUTE PROCESSING OPTION MUST BE Y (YES) OR N (NO)

Explanation: The user specified an execute option other than 'YES', 'NO', or the abbreviation 'Y' or 'N'. A valid user response determines whether SPUFI executes the SQL statements in the user input data set.

System Action: SPUFI waits until the user enters a valid response.

User Response: Type in a 'Y' or an 'N', and press 'ENTER'.

DSNE353A  BROWSE PROCESSING OPTION MUST BE Y (YES) OR N (NO)

Explanation: The user specified a browse option other than 'YES', 'NO', or the abbreviation 'Y' or 'N'. A valid user response determines whether SPUFI invokes ISPF BROWSE to allow the user to browse the output data set.

System Action: SPUFI will wait until the user enters a valid response.

User Response: Type in a 'Y' or an 'N', and press 'ENTER'.

DSNE354A  AUTOCOMMIT PROCESSING OPTION MUST BE Y (YES) OR N (NO)

Explanation: The user specified an AUTOCOMMIT option other than 'YES', 'NO', or the abbreviation 'Y' or 'N'. A valid user response determines whether SPUFI automatically commits all the changes to the database subsystem. This was encountered as a result of executing the user's SQL statement(s). The commit is done at the end of the processing of an input data set, if it is requested and if there has been no SQL execution error.
DSNE355A • DSNE366A

System Action: SPUFI waits until the user enters a valid response.
User Response: Type in a ‘Y’ or an ‘N’, and press ‘ENTER’.

DSNE355A CHANGE DEFAULTS PROCESSING OPTION MUST BE Y (YES) OR N (NO)

Explanation: The user specified a change-default option other than ‘YES’, ‘NO’, or the abbreviation ‘Y’ or ‘N’. A valid user response determines whether SPUFI displays the current-session SPUFI defaults and allows the user to change the defaults.

System Action: SPUFI waits until the user enters a valid response.
User Response: Type in a ‘Y’ or an ‘N’, and press ‘ENTER’.

DSNE359A OUTPUT DATA SET NAME REQUIRED FOR EXECUTE OR BROWSE

Explanation: The user did not specify the name of the output data set.

System Action: SPUFI waits until the user specifies an output data set.
User Response: Type in the correct entry, and press ‘ENTER’.

DSNE360A THE OUTPUT DATA SET MUST RESIDE ON DASD

Explanation: The user has attempted to send the output of SPUFI to a SYSOUT data set. He must enter a generic device class that contains only DASD devices.

System Action: SPUFI waits until the user specifies a valid output device class.
User Response: Type in the correct entry, and press ‘ENTER’.

DSNE361I SPUFI PROCESSING COMPLETE

Explanation: This informational message is displayed after SPUFI successfully created the output data set. If errors are encountered before the completion of output data set processing, or during the subsequent BROWSE OUTPUT option for this data set, this message is replaced by either SPUFI or TSO/ISPF error messages.

System Action: The system waits for the next user input.
User Response: At this point you can change the SPUFI panel variable settings to initiate a new SPUFI request, or you can exit SPUFI.

DSNE363A ONLY RR (REPEATABLE READ) OR CS (CURSOR STABILITY) ALLOWED

Explanation: The user has entered an invalid isolation level. This value must be either RR or CS. ‘Isolation level’ here refers to the degree to which the SPUFI user wants to isolate SQL execution from the effects of other concurrently executing DB2 applications.

If the repeatable read (RR) level is specified and the AUTOCOMMIT option is ‘YES’, other applications can modify the selected database values as soon as the SPUFI EXECUTE phase is completed and as soon as the automatic COMMIT (or ROLLBACK, if an error was encountered) operation is performed. Therefore, it is possible that the retrieved data being browsed by the user has already been modified by another application.

If the RR level is specified and the AUTOCOMMIT option is ‘NO’, no other DB2 application executing concurrently can change any of the selected database values until the SPUFI user issues either a COMMIT or a ROLLBACK. Therefore, other applications might be in a normal wait state while the SPUFI user is browsing the output data set.

If the cursor stability (CS) level is specified, it does not make any difference whether the AUTOCOMMIT option is ‘YES’ or ‘NO’. Other concurrently executing DB2 applications can change the selected database values as soon as the SELECT phase is completed.

System Action: SPUFI waits until the user specifies either ‘RR’ or ‘CS’.
User Response: Type in the correct entry, and press ‘ENTER’.

DSNE364A token IS INVALID AS AN SQL STATEMENT TERMINATOR

Explanation: The user has entered an SQL statement terminator (token) that is not supported. The following values are not valid for use as a SQL statement terminator:

- blank
- comma
- single and double quotes
- underscore
- left and right parenthesis

System Action: The statement cannot be executed.
User Response: Specify a valid SQL statement terminator.

DSNE365A SQL STATEMENT TERMINATOR HAS BEEN CHANGED TO token

Explanation: The SPUFI input data set contains a #SET statement that changes the SQL statement terminator to token.

System Action: token is the SQL statement terminator until another #SET statement changes it or the end of the input data is reached.

DSNE366A ONLY THE LISTED RECFM TYPES ARE ALLOWED

Explanation: The user has entered an invalid record format for the output data set.

System Action: The system waits until the user enters one of the allowed RECFM types.
User Response: Enter a RECFM of V, VB, VBA, F, FB, or FBA.
**DSNE367A** ACTION MUST BE C (COMMIT) OR R (ROLLBACK) OR D (DEFER)

**Explanation:** This message requests the user to make a commit action decision.

**User Response:** To commit all the changes made since the last commit point, enter a ‘C’. To undo all the changes that have been made since the last commit point, enter an ‘R’. To defer the decision, enter a blank.

**DSNE368A** YES OR NO MUST BE ENTERED FOR EACH PROCESSING OPTION

**Explanation:** One of the processing options was left blank or set to blank by the user.

**User Response:** Enter ‘YES’ or ‘NO’ for each processing option.

**DSNE370A** INPUT DATA SET COULD NOT BE OPENED

**Explanation:** The input data set could not be opened because of invalid data set attributes. The logical record length (LRECL) of the input data set must be 80K. The record format (RECFM) must be either F or FB. The input data set may be either sequential or partitioned.

**User Response:** Specify an input data set having valid attributes.

**DSNE371A** OUTPUT DATA SET COULD NOT BE OPENED

**Explanation:** The output data set could not be opened because of invalid data set attributes. The logical record length (LRECL) must be at least 80KB and less than 32KB. The record format (RECFM) must be either F, FB, FBA, V, VB, or VBA. The output data set must be sequential.

**User Response:** Either specify an output data set having valid attributes, or enter correct attributes for this data set.

**DSNE372A** OUTPUT DATA SET MUST BE SEQUENTIAL

**Explanation:** The user has requested that a nonsequential output data set contain the output from execution of SQL statements.

**User Response:** Enter the data-set-name of a sequential data set for the output data set.

**DSNE374A** OUTPUT DATA SET MUST BE SEQUENTIAL

**Explanation:** The output data set is of unrecognized organization. It must be sequential.

**System Action:** Processing does not begin until the panel entries are correct and the user presses ‘ENTER’.

**User Response:** The output data set must be sequential. Enter a sequential data-set-name (no member) in the output data set field.

**DSNE375A** ACCESS TO INPUT DATA SET NOT AUTHORIZED

**Explanation:** A local installation-supplied exit has rejected access to the input data set specified by the user.

**User Response:** Either specify the name of a data set for which authorization will be allowed, or arrange to authorize the original data-set-name. Resubmit the request.

**DSNE376A** ACCESS TO OUTPUT DATA SET NOT AUTHORIZED

**Explanation:** A local installation-supplied exit has rejected access to the output data set.

**User Response:** Either specify the name of a data set for which authorization will be allowed, or arrange to authorize the original data-set-name. Resubmit the request.

**DSNE377A** INPUT DATA SET RECFM MUST BE F OR FB WITH LRECL 79 OR 80

**Explanation:** The user specified an input data set that does not have the required attributes (F or FB with LRECL 79 or 80).

**Note:** If the input data set has an LRECL of 79, SPUFI assumes the data set was exported by QMF. Therefore, it is recommended that you should not use an LRECL of 79 for a data set that is not exported from QMF.

**User Response:** Either specify the name of a data set for which authorization will be allowed, or arrange to authorize the original data-set-name. Resubmit the request.

**DSNE378A** ASA CONTROL CHARACTER NOT ALLOWED ON INPUT DATA SET RECFM

**Explanation:** The user attempted to use an input data set containing forms control characters or machine control characters. These characters are not allowed on the input data set.

**User Response:** Remove the forms control characters or machine control characters from the input data set, and try again.

**DSNE379A** text from DYNALLOC

**Explanation:** An attempt to allocate a data set has failed. This message contains the secondary explanation for the failure.

**User Response:** Correct the condition, and resubmit the subcommand.

**DSNE381A** UNEXPECTED ALLOCATION RETURN CODE

**Explanation:** An unexpected return code from SVC 99 was received. The return code received is the DYNALLOC (SVC 99) return code. Refer to the appropriate MVS publication for explanations of the return and reason codes.

**User Response:** Correct the condition, and resubmit the subcommand.

**DSNE383A** INVALID OUTPUT DATA SET RECORD FORMAT. OPEN RETURN CODE rcode

**Explanation:** The data set format was invalid. Acceptable record formats are: F, FB, FBA, V, VB, or VBA.

**User Response:** Enter a valid value in the record format field.
**DSNE384A** UNEXPECTED DEALLOCATION RETURN CODE return-code, reason-code

**Explanation:** A deallocation request has returned an unexpected return and reason code.

**User Response:** Refer to the appropriate MVS publication for explanations of the return and reason codes.

**DSNE385A** ENTER MEMBER NAME. INPUT DATA SET IS PARTITIONED

**Explanation:** The input data set is partitioned, and the user did not enter the member name on the SPUFI main menu.

**System Action:** Processing does not begin until the panel entries are correct. If any of the processing options are changed, this message is ignored, and processing will proceed according to the new settings.

**User Response:** Enter the member name.

**DSNE386A** MEMBER member-name NOT PRESENT IN SPECIFIED INPUT DATA SET

**Explanation:** The named member is not in the input data set.

**System Action:** Processing does not begin until the panel entries are correct.

**User Response:** Enter a correct member name or a correct data-set-name.

**DSNE387I** DSNTIAR ERROR. RETURN CODE = return-code

**Explanation:** An internal DB2 error has occurred. DSNTIAR attempted to format a message to explain a nonzero SQL code, but the attempt failed.

**User Response:** Notify the system programmer.

**System Programmer Response:** Print the ISPF log, and collect a dump of the TSO address space. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**DSNE388A** INPUT DATA SET MUST BE SEQUENTIAL OR PARTITIONED

**Explanation:** The input data set organization is not recognized.

**System Action:** Processing does not begin until the panel entries are correct.

**User Response:** Enter a data-set-name with sequential or partitioned organization. It may be necessary to allocate a sequential or partitioned data set.

**DSNE389A** A MEMBER HAS BEEN SPECIFIED FOR A SEQUENTIAL DATA SET

**Explanation:** The user has specified a member as input to SPUFI. However, the input data set specified is sequential.

**System Action:** Processing does not begin until the panel entries are correct.

**User Response:** Enter the data-set-name without attempting to specify a member.

**DSNE390A** THE OUTPUT DATA SET ATTRIBUTES ARE INCONSISTENT

**Explanation:** This message indicates that the user made one of three possible errors in specifying block size and logical record length (LRECL):

- The user specified a record format (RECFM) of F, but the block size is not equal to the logical record length (LRECL).
- The user specified a record format (RECFM) of F, FB, or FBA, but block size is not evenly divisible by logical record length (LRECL).
- The user specified a record format (RECFM) of VB, but the block size is less than logical record length (LRECL) + 4. The user must allow 4 bytes for the block header.

**User Response:** Specify logical record length (LRECL) and block size appropriately on the DSNESP02 panel.

**DSNE391I** FREEMAIN ERROR IN MODULE module-name

**Explanation:** SPUFI encountered a FREEMAIN error in the specified module.

**System Action:** This message is logged in the ISPF log data set. No abend occurs.

**User Response:** Notify the system programmer or system administrator.

**System Programmer Response:** Ensure that enough storage is allocated to the TSO user.

**DSNE392I** GETMAIN ERROR IN MODULE module-name

**Explanation:** SPUFI encountered a GETMAIN error in the specified module.

**System Action:** This message is logged in the ISPF log data set. User abend X’00C50003’ is issued.

**User Response:** Notify the system programmer or system administrator.

**System Programmer Response:** Ensure that enough storage is allocated to the TSO user.

**DSNE393I** SPF VDELETE ERROR IN MODULE DSNESM90. ERROR CODE = flag

**Explanation:** An internal SPUFI error has occurred. CSECT DSNESM90 tried to delete an ISPF dialog variable that was not previously defined.

**System Action:** This message is logged in the ISPF log data set. No abend is issued. However, if the problem persists, notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** Record the error code ‘flag’. It has no user significance, but it can assist the IBM Support Center in resolving the problem.
### DSNE395I UNEXPECTED RETURN CODE FROM SPF SERVICE

**Explanation:** A return code of 4 from ISPF DISPLAY or a return code of 8 from the ISPF editor was encountered.

**System Action:** The message is displayed on the SPUFI panel and logged in the ISPF log data set. No user abend is issued.

**User Response:** Notify the system programmer.

**System Programmer Response:** If a new release of ISPF is used, determine whether the above return codes are now assigned meaning by ISPF.

**Problem Determination:** This message may be issued if a previously unassigned (by ISPF) return code from the ISPF DISPLAY or EDIT function is encountered. If a new release of ISPF is used, determine whether the above return codes are now assigned meaning by ISPF.

### DSNE396A YOU CANNOT SPECIFY DEFER WHEN LEAVING SPUFI

**Explanation:** You have attempted to leave SPUFI with outstanding database changes not yet committed or rolled back. You can’t leave SPUFI unless a decision has been made to commit or rollback.

**System Action:** The system is waiting for new input to the panel.

**User Response:** Specify COMMIT or ROLLBACK.

### DSNE415A csect-name TYPE IS DATE

**Explanation:** This is a SPUFI trace message. SPUFI has looked in the SQLTYPE field of the SQLDA and detected a data type of DATE.

### DSNE416A csect-name TYPE IS TIME

**Explanation:** This is a SPUFI trace message. SPUFI has looked in the SQLTYPE field of the SQLDA and detected a data type of TIME.

### DSNE417A csect-name TYPE IS TIMESTAMP

**Explanation:** This is a SPUFI trace message. SPUFI has looked in the SQLTYPE field of the SQLDA and detected a data type of TIMESTAMP.

### DSNE457I csect-name ARITHMETIC ERROR IN THE CURRENT ROW AND COLUMN

**Explanation:** This is a SPUFI trace message. SPUFI has looked in the SQLDA and detected an arithmetic error. The indicator variable associated with this value contains -2.

### DSNE601I SQL STATEMENTS ASSUMED TO BE BETWEEN COLUMNS nn AND nn

**Explanation:** This message indicates which record columns in the input data set are scanned for SQL statements. For data sets of type COBOL, columns 8 through 72 are scanned. For STANDARD data set types, if the LRECL is 79 then columns 1 through 71 are scanned, and if the LRECL is 80 then columns 1 through 72 are scanned.

**System Action:** This message is written to the SPUFI output data set along with other summary messages.

### DSNE603E INPUT STATEMENT HAS UNBALANCED APOSTROPHES

**Explanation:** An opening apostrophe was detected in an input record, but the end of data set was reached before a closing apostrophe was encountered.

**System Action:** SPUFI processing stops. Correct the error, and start again.

**User Response:** A closing apostrophe was probably omitted from a literal value. Add the missing apostrophe, and execute the input file again.

### DSNE604E THE SQL STATEMENT EXCEEDS THE MAXIMUM ALLOWED LENGTH

**Explanation:** This message indicates that the preceding SQL statement in the output data set exceeds the maximum length allowed. An SQL statement may span up to a maximum of 455 input records.

**System Action:** SPUFI processing stops. Correct the error, and start again.

**User Response:** Edit the SQL statement in question so that it resides on fewer input records.

### DSNE605E THE INPUT DATA SET IS EMPTY

**Explanation:** The user has specified an input data set that does not contain any valid SQL statements.

**System Action:** SPUFI processing stops. Correct the error, and start again.

**User Response:** Edit SQL statements into the specified data set, or specify another input data set that contains valid SQL statements.

### DSNE606E INVALID USE OF AN SQL STATEMENT TERMINATOR

**Explanation:** An SQL statement terminator has been used improperly in an SQL input statement. Either two successive statement terminators were encountered, or a series of blanks followed by a terminator was detected. The proper use of the SQL statement terminator is to delimit the end of a valid SQL statement.

**System Action:** SPUFI processing stops. Correct the error, and start again.

**User Response:** Remove the extraneous terminator from the input data set.

### DSNE607E PREVIOUS INPUT RECORD HAS UNBALANCED SO/SI CHARACTERS

**Explanation:** A shift out (SO) character was detected in the previous input record with no corresponding shift in (SI) character in the record. The SO/SI characters delimit a DBCS string in the SPUFI input data set. SPUFI requires that SO/SI characters be paired within an input record.

**System Action:** SPUFI processing stops.

**User Response:** A closing SI character was probably omitted from a literal value. Add the missing SI character, and re-execute the input file.
**DSNE609E**  INPUT STATEMENT HAS UNBALANCED QUOTES

**Explanation:** An opening quote (‘) was detected in an input record, but a corresponding quote was not found at the end. Two sets of quotes are used to delimit a statement.

**System Action:** SPUFI processing stops.

**User Response:** A closing quote was probably omitted from a literal value. Add the missing quote, and execute the input file again.

---

**DSNE610I**  NUMBER OF ROWS DISPLAYED IS nn

**Explanation:** Execution of an SQL SELECT statement causes one or more rows of data to be displayed. This message appears in the output data set following the returned data for a SELECT. It gives a count, ‘nn’, of the number of rows displayed.

**System Action:** Input data set processing is completed, and this message is included in the SPUFI output.

---

**DSNE611I**  COLUMN HEADER FOR COLUMN NUMBER nn WAS TRUNCATED

**Explanation:** An SQL SELECT statement was executed, but the specified column name, identified by ‘nn’ in the message, was truncated. This truncation occurred either because the column name was longer than the remaining record width or because the name was longer than the user-specified maximum field length.

**System Action:** Input data set processing is completed, and this message is included in the SPUFI output.

**User Response:** If the truncation is caused by insufficient record width, use a larger LRECL for the output data set or specify fewer data columns to be returned on the SELECT statement.

If the truncation is caused by the user-specified maximum field length setting, use a larger value for this setting.

---

**DSNE612I**  DATA FOR COLUMN HEADER name COLUMN NUMBER nn WAS TRUNCATED

**Explanation:** An SQL SELECT statement was executed, but data for the specified column name, identified by ‘nn’ in the message, was truncated. This truncation occurred either because the data was longer than the remaining record width or because the data was longer than the user-specified maximum field length.

**System Action:** Input data set processing is completed, and this message is included in the SPUFI output.

**User Response:** If the truncation is because of insufficient record width, use a larger LRECL for the output data set or specify fewer data columns to be returned on the SELECT statement.

If the truncation is because of the user-specified maximum field length setting, use a larger value for this setting.

---

**DSNE613I**  OUTPUT LRECL IS TOO SMALL TO DISPLAY THE FOLLOWING COLUMNS:

**Explanation:** An SQL SELECT statement was executed, but the logical record length of the output data set was not large enough to display the column names and data values of all returned columns. The columns specified following this message were not displayed because of insufficient remaining record width.

**System Action:** Input data set processing is completed, and this message is included in the SPUFI output.

**User Response:** This condition can be avoided by using a larger LRECL for the output data set or by specifying that fewer data columns be returned on the SELECT statement.

---

**DSNE614I**  AUTOCOMMIT IS NO, NO CHANGES COMMITTED

**Explanation:** The user delayed committing or rolling back changes made during execution of the input file until later in the session. This is done by specifying an AUTOCOMMIT option of ‘NO’.

**System Action:** Input data set processing is completed, and this message is included in the SPUFI output.

**User Response:** Commit or roll back these changes before ending the session.

---

**DSNE615I**  NUMBER OF ROWS AFFECTED IS nn

**Explanation:** This message is written to the output data set following execution of an SQL UPDATE, INSERT, or DELETE statement. ‘nn’ in the message is a count of the number of rows that were modified as a result of executing the UPDATE, INSERT, or DELETE statement.

**Note:** In the case of a mass delete of a table in a segmented table space where DB2 does not access nor count the individual rows, this message will not be displayed.

**System Action:** Input data set processing is completed, and this message is included in the SPUFI output.

---

**DSNE616I**  STATEMENT EXECUTION WAS SUCCESSFUL, SQLCODE IS number

**Explanation:** This message is written to the output data set following the successful execution of an SQL statement from the input data set. ‘number’ specifies the SQL return code for the statement. These return codes are listed in [Section 2. SQL Return Codes](#).

**System Action:** Input data set processing is completed, and this message is included in the SPUFI output.

---

**DSNE617I**  COMMIT PERFORMED, SQLCODE IS number

**Explanation:** When an input file is executed successfully and the user specified an AUTOCOMMIT option of ‘YES’, this message is written to the output data set to indicate the status of the COMMIT that was performed. ‘number’ specifies the SQL return code for the COMMIT. These return codes are listed in [Section 2. SQL Return Codes](#) on page 17.

**System Action:** Input data set processing is completed, and this message is included in the SPUFI output.
DSNE618I  ROLLBACK PERFORMED, SQLCODE IS number

Explanation: When an error is encountered while executing a SPUFI input file, and the user specified an AUTOCOMMIT option of 'YES', this message will be written to the output data set to indicate the status of the ROLLBACK that was performed. 'number' specifies the SQL return code for the statement. These return codes are listed in Section 2, SQL Return Codes on page 17.

System Action: Input data set processing is completed, and this message is included in the SPUFI output.

DSNE620I  NUMBER OF SQL STATEMENTS PROCESSED IS nn

Explanation: This message is written to the output data set after processing all SQL statements in the current input data set. The term 'nn' is a count of the number of SQL statements processed.

System Action: Input data set processing is completed, and this message is included in the SPUFI output.

DSNE621I  NUMBER OF INPUT RECORDS READ IS nn

Explanation: This message is written to the output data set after processing all SQL statements in the current input data set. The term 'nn' is a count of the total number of records read from the input data set.

System Action: Input data set processing is completed, and this message is included in the SPUFI output.

DSNE622I  NUMBER OF OUTPUT RECORDS WRITTEN IS nn

Explanation: This message is written to the output data set after processing all SQL statements in the current input data set. The term 'nn' is a count of the total number of records written to the output data set.

System Action: Input data set processing is completed, and this message is included in the SPUFI output.

DSNE623I  SYNTAX ERROR AT RECORD xx, OFFSET xx

Explanation: A syntax error was detected in the SQL statement preceding this message in the output data set. 'xx' identifies the erroneous line number in the SQL statement, and 'yy' identifies the offset (in characters) of the error within that record.

System Action: Input data set processing is completed, and this message is included in the SPUFI output.

User Response: Correct the specified syntax error in the input data set, and execute the job again.

DSNE624I  UNABLE TO LOAD ISPLINK MODULE. SPUFI PROCESSING TERMINATED

Explanation: During SPUFI initialization processing, an error was encountered attempting to LOAD the ISPF interface module, ISPLINK. This module could not be located in the LNKLST or STEPLIB library concatenation.

System Action: SPUFI processing is terminated.

User Response: Rearrange your library concatenation so that the ISPLINK module can be located. This module resides in the ISPF load library.

DSNE625I  CONNECT TO LOCATION (location name) PERFORMED, SQLCODE IS number

Explanation: The SPUFI user has indicated that the SQL statements defined in the input file are to be processed by the server at the remote location specified in the CONNECT LOCATION field of the SPUFI panel.

This message appears in the output file and indicates that an SQL CONNECT request was issued by SPUFI to the specified location name. The 'number' specifies the SQL return code associated with the CONNECT request. These return codes are listed in Section 2, SQL Return Codes on page 17.

System Action: Subsequent processing of the SQL statements in the input file is based upon the successful completion of the CONNECT request. If the request is unsuccessful, the SQL error number and all associated error messages are placed in the output file.

User Response: Respond as indicated by the SQL code returned.

DSNE626I  MAXIMUM OUTPUT LINES FOR SELECT STATEMENT REACHED (number), PROCESSING FOR CURRENT SELECT STATEMENT TERMINATED

Explanation: The maximum number of output lines to be displayed for a SELECT statement was reached. Processing of the current SELECT statement is terminated. The maximum number to display is specified by the SPUFI user on the CURRENT SPUFI DEFAULTS panel.

This message appears in the SPUFI output file.

System Action: Processing of subsequent SQL statements in the input file continues.

User Response: If the number of lines displayed is insufficient, you can increase the maximum number of lines to be displayed for SELECT statements on the CURRENT SPUFI DEFAULTS panel and re-execute the SELECT statement.

DSNE627I  csect-id FOR SQLCODE = number, USER REQUESTED: action

Explanation: During PREPARE processing of the SQL statement, SPUFI received an SQLCODE (+495) and requested you to respond with the desired action to be taken by SPUFI (CONTINUE or BYPASS).

SPUFI does not consider this to be an SQL statement error and places this message in the SPUFI output file to document the SQLCODE received and the action you requested. 'number' specifies the SQL return code associated with the PREPARE request. These return codes are listed in Section 2, SQL Return Codes on page 17.

System Action: SPUFI processing for this statement is based on action documented in the message:

- CONTINUE
  - Processing for the current SQL statement continues normally.

- BYPASS
  - Processing for the current SQL statement is terminated without error.
User Response: Respond as indicated by the SQL code

---

**DSNE800A**  
NO DEFAULT VALUES WERE CHANGED. Press ENTER TO CONTINUE

**Explanation:** The user left panel DSNESP02 without changing it. This panel contains all the defaults that can be modified by the user.

**System Action:** This message is presented on the SPUFI panel DSNESP01. SPUFI waits for the next user input.

**User Response:** Press ‘ENTER’ if you want to continue.

---

**DSNE803A**  
INPUT FILE WAS NOT CHANGED. PRESS ENTER TO CONTINUE

**Explanation:** The user has exited from the ISPF editor without modifying the input data set.

**System Action:** The system waits for the next user input.

**User Response:** Press ‘ENTER’ if you want to continue. The SPUFI panel variable settings can be changed at this point.

---

**DSNE804A**  
TO CONTINUE, C (COMMIT) OR R (ROLLBACK) MUST BE SPECIFIED

**Explanation:** The user has specified the AUTOCOMMIT=NO option and now wants either to exit or to switch to another DB2 subsystem with outstanding work uncommitted on the current DB2 subsystem.

**System Action:** DB2 waits for the user to specify either the COMMIT (C) or the ROLLBACK (R) option.

**User Response:** Enter ‘C’ or ‘R’ to continue.

---

**DSNE808A**  
EDIT SESSION HAS COMPLETED. PRESS ENTER TO CONTINUE.

**Explanation:** The user has exited from the ISPF editor.

**System Action:** SPUFI waits for the next user input.

**User Response:** Press ‘Enter’ if you want to continue. Press ‘END’ if you want to terminate your SPUFI session. The SPUFI panel variable settings can be changed at this point.

---

**DSNE901I**  
EXECUTION COMPLETE

**Explanation:** Execution of a subcommand has successfully completed.

**System Action:** The TSO attachment facility is ready for more input.

---

**DSNE903I**  
WARNING, DECLARATION HAS SAME NAME AS TABLE table-name

**Explanation:** A DCLGEN subcommand has a ‘STRUCTURE’ parameter that is the same as the ‘table name’ specified in the message. The requested declaration has been created, but this could cause conflicts with internal names.

**System Action:** DCLGEN execution continues.

**User Response:** Choose a different ‘STRUCTURE’ parameter.

---

**DSNE904I**  
EXECUTION COMPLETE, MEMBER member-name REPLACED

**Explanation:** A DCLGEN subcommand executed successfully, replacing the ‘member-name’ specified in the message.

**System Action:** The TSO attachment facility is ready for more input.

---

**DSNE905I**  
EXECUTION COMPLETE, MEMBER member-name ADDED

**Explanation:** A DCLGEN subcommand executed successfully, adding the ‘member-name’ specified in the message to the data set specified in the DCLGEN subcommand.

**System Action:** The TSO attachment facility is ready for more input.

---

**DSNE908E**  
csect-name INVALID USE OF parameter IN PARAMETER LIST OF KEYWORD keyword.

**Explanation:** An invalid parameter was specified in the parameter list of the specified keyword.

**Severity:** 8

**System Action:** Subcommand processing is terminated. The TSO attachment facility is ready for more input.

**User Response:** Correct the parameter list in error, and resubmit the job.

---

**DSNE909E**  
csect-name WARNING, DBCSSYMBOL KEYWORD IS INVALID WITH LANGUAGE language KEYWORD IGNORED

**Explanation:** You specified the DBCSSYMBOL keyword in your DCLGEN invocation, but your LANGUAGE keyword value was not COB2. DBCSSYMBOL only applies to COB2 PICTURE clauses. DCLGEN will ignore this keyword.

**System Action:** DCLGEN processing continues.

**User Response:** In the future, do not specify the DBCSSYMBOL keyword unless the LANGUAGE keyword value is COB2.

---

**DSNE910E**  
csect-name WARNING, THE OWNER KEYWORD WAS SPECIFIED WITH A QUALIFIED TABLE NAME. OWNER KEYWORD IGNORED

**Explanation:** You specified both the OWNER keyword and a qualified table name for the TABLE keyword in your DCLGEN invocation. The table qualifier will be used as the table owner, and the OWNER keyword will be ignored.

**System Action:** DCLGEN processing continues.

**User Response:** In the future, specify either a qualified table name for the TABLE keyword, or an unqualified table name for the TABLE keyword along with the OWNER keyword.

---

**DSNE920E**  
member-name ALREADY EXISTS, SPECIFY ACTION(REPLACE) TO REPLACE

**Explanation:** The DCLGEN user tried to overwrite an old declaration with a new one without specifying REPLACE on the ‘ACTION’ parameter.

**System Action:** The TSO attachment facility is ready for more input.

**User Response:** Change the ‘ACTION’ parameter to
**DSNE921E • DSNE929E**

REPLACE (if that’s actually what you want to do), and resubmit the command.

---

**DSNE921E REQUIRED PARAMETER table-parameter IS MISSING**

**Explanation:** Your DCLGEN subcommand was missing the required TABLE parameter.

**System Action:** Your DCLGEN subcommand was not processed. The DSN command processor issued a return code of 8. DSN is ready for more input.

**User Response:** Resubmit the DCLGEN subcommand with a TABLE parameter.

---

**DSNE922E TABLE NAME QUALIFIER OF qualifier IS TOO LONG. CANNOT EXCEED 8 CHARACTERS IN LENGTH**

**Explanation:** DCLGEN detected an invalid TABLE parameter. The table name qualifier (the left portion of the table name) was too long.

**System Action:** Your DCLGEN subcommand was not processed. The DSN command processor issued a return code of 8. DSN is ready for more input.

**User Response:** Resubmit the DCLGEN subcommand with a shorter table name qualifier.

---

**DSNE923E CSECT csect-name FOUND AN UNRECOGNIZED LANGUAGE unknown**

**Explanation:** This is a DCLGEN subsystem error, not a user error. The language parameter ‘unknown’ is not known to the subsystem.

**System Action:** The TSO attachment facility is ready for more input.

**User Response:** Report the problem to the system programmer.

**System Programmer Response:** Re-create the problem with DSN tracing turned on. Collect the trace stream in the DSNTTRACE data set. If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

---

**DSNE924E PARSE FAILED IN CSECT csect-name PARAMETER parm, FLAG flag**

**Explanation:** This is a DB2 subsystem error, not a user error. The ‘PARAM’ parameter was not correctly parsed. The flag specified was detected as an inappropriate value in a parse results field.

**System Action:** The TSO attachment facility is ready for more input.

**User Response:** Report the problem to the system programmer.

**System Programmer Response:** Re-create the problem with DSN tracing turned on. Collect the trace stream in the DSNTTRACE data set. Use the ABEND subcommand of the DSN command processor to collect a dump. If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

---

**DSNE925E BUFFER OVERFLOW IN CSECT csect-name WHILE WRITING string**

**Explanation:** This is a DCLGEN subsystem error. CSECT ‘csect-name’ detected a buffer overflow condition while attempting to write ‘string’.

**System Action:** The TSO attachment facility is ready for more input.

**User Response:** Notify the system programmer.

**System Programmer Response:** Re-create the problem with DSN tracing turned on. Collect the trace stream in the DSNTTRACE data set. If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

---

**DSNE926E COMMAND REJECTED, command NOT SUPPORTED UNDER subsystem**

**Explanation:** The user entered a TSO TIME or TEST command. These are not supported by DSN or DB2I.

**System Action:** The user should leave DSN or DB2I, return to TSO, and retry the command. DSN can be run under TSO TEST. The TSO attachment facility is ready for more input.

**User Response:** Enter the DSN subcommand, or leave DSN to execute the requested command.

---

**DSNE927E RUN SUBCOMMANDS REQUIRE (1)PROGRAM PARM OR (2)PLAN AND CP PARMS**

**Explanation:** RUN subcommands may contain (1) the ‘PROGRAM’ parameter and, optionally, the ‘PLAN’ parameter or (2) the ‘PLAN’ and command processor (‘CP’) parameters. Combinations of (1) and (2) are not allowed.

**System Action:** The TSO attachment facility is ready for more input.

**User Response:** Correct the subcommand, and resubmit the job.

---

**DSNE928E RUN SUBCOMMANDS CANNOT HAVE A PROGRAM PARM AND A CP PARM**

**Explanation:** A RUN subcommand cannot contain both the ‘PROGRAM’ and command processor (‘CP’) parameters. The subcommand should be resubmitted with only one of the parameters.

**System Action:** The TSO attachment facility is ready for more input.

**User Response:** Correct the subcommand, and resubmit the job.

---

**DSNE929E TABLE NAME LOCATION OF (location-name) IS TOO LONG. CANNOT EXCEED 16 CHARACTERS IN LENGTH.**

**Explanation:** DCLGEN detected an invalid AT(location) keyword parameter. The specified location name is too long.

**System Action:** Your DCLGEN subcommand was not processed. The DSN command processor issues a return code of 8. The DSN is ready for more input.

**User Response:** Resubmit the DCLGEN subcommand specifying a location name that does not exceed 16 characters.
**DSNE930E**  TABLE NAME OF table-name MUST BE QUALIFIED WHEN SPECIFIED WITH LOCATION OF location-name

Explanation: DCLGEN detected an invalid TABLE keyword parameter. You must specify a qualified table name with the AT (location) keyword.

System Action: Your DCLGEN subcommand was not processed. The DSN command processor issues a return code of 8. DSN is ready for more input.

User Response: Specify a qualified table name and resubmit the DCLGEN command.

---

**DSNE931E**  csect-name keyword-name (parameter_value)
CONTAINS AN INVALID SYMBOL (symbol)

Explanation: An invalid 'symbol' (symbol) was specified in the 'keyword-name' associated with the specified 'parameter_value'.

Severity: 8

System Action: Subcommand processing is terminated. The TSO attachment facility is ready for more input.

User Response: Correct the keyword 'parameter_value' in error, and resubmit the job.

---

**DSNE932E**  WARNING, ONLY IBM SUPPLIED names SHOULD BEGIN WITH DSN

Explanation: The user has issued a BIND, REBIND, or FREE subcommand, using a name or id that begins with DSN.

System Action: Processing continues.

User Response: In the future, do not use plan-names, collection-ids, or package-ids that begin with DSN. It would be a good idea to FREE the plan or package you just created and to BIND again with a new plan-name, collection-id, or package-id.

---

**DSNE935I**  ... IS THE DCLGEN COMMAND THAT MADE THE FOLLOWING STATEMENTS

Explanation: This message is a part of normal DCLGEN output. It identifies the DCLGEN command that produced the declaration of which it is a part.

System Action: This message is included in the DCLGEN output.

---

**DSNE936I**  THE NUMBER OF COLUMNS DESCRIBED BY THIS DECLARATION IS nnn

Explanation: This message is a part of normal DCLGEN output. It tells how many columns were in the table that was named in the DCLGEN command.

System Action: This message is included in the DCLGEN output.

---

**DSNE937I**  COBOL DECLARATION FOR TABLE table-name

Explanation: This message is a part of normal DCLGEN output. It tells the name of the table for which the declaration was created.

System Action: This message is included in the DCLGEN output.

---

**DSNE938I**  PLI DECLARATION FOR TABLE table-name

Explanation: This message is a part of normal DCLGEN output. It tells the name of the table for which the declaration was created.

System Action: This message is included in the DCLGEN output.

---

**DSNE939E**  csect-name THE COMBINATION ACQUIRE(ALLOCATE) AND RELEASE(COMMIT) IS NOT ALLOWED

Explanation: The BIND or REBIND subcommand was submitted with conflicting parameters. You cannot specify ACQUIRE(ALLOCATE) and RELEASE(COMMIT) on the same subcommand.

System Action: The subcommand is terminated and the DSN command processor reissues the DSN prompt to allow another subcommand to be entered.

User Response: Enter the corrected subcommand. Refer to "DB2 Command Reference" for additional information about the BIND and REBIND subcommands.

---

**DSNE940E**  DEFER(PREPARE) INVALID WITH NODEFER(PREPARE)

Explanation: The BIND or REBIND subcommand was submitted with conflicting parameters. You cannot specify DEFER(PREPARE) and NODEFER(PREPARE) on the same subcommand because these actions conflict.

System Action: The subcommand is terminated and the DSN command processor reissues the DSN prompt to allow another subcommand to be entered.

User Response: Enter the corrected subcommand. Refer to "DB2 Command Reference" for additional information regarding the BIND and REBIND subcommands.

---

**DSNE941I**  DSNBIND IS A RESERVED PLAN NAME

Explanation: This message is generated when the plan name is 'DSNBIND' in a BIND statement.

System Action: Subcommand processing is terminated. The TSO attachment facility is ready for more input.

User Response: Change the plan-name and resubmit the job.

---

**DSNE942E**  csect-name REMOTE CONNECTION NAME (parameter_value) HAS INVALID FORMAT

Explanation: The REMOTE connection name 'parameter_value' contains a < or > character in the starting or ending position of the parameter, but the parameter value is not bracketed by both characters. This message is also generated if the first character of the connection name is not an alphabetic character.

If the LU name format of the REMOTE keyword is to be used, the name must be specified as <LU_name>.

Severity: 8

System Action: Subcommand processing is terminated. DSN command processor reissues the DSN prompt to allow another subcommand to be entered.

User Response: Correct the keyword 'parameter_value' in error, and resubmit the job. Refer to "DB2 Command Reference" for additional information about the BIND and REBIND subcommands.
You specified the DCLGEN QUOTE parameter and a non-COBOL language parameter. This combination is not valid. The QUOTE parameter was specified as either a parameter on the DCLGEN subcommand or a default set for your site at DB2 installation time.

The DCLGEN processor changed the QUOTE setting (for this run) to APOST.

System Action: DCLGEN processing continues and should produce valid output.

User Response: If you used QUOTE on the DCLGEN command, you may want to change it to APOST before submitting it again.

Explanation: A DSN command processor subcommand (indicated in the message) has encountered an error which stopped DSN from processing this subcommand. The subcommand will not complete normally. This message is accompanied by other messages explaining the exact nature of the problem.

System Action: Subcommand processing terminates. The DSN prompt is reissued, indicating DSN is ready for another subcommand.

User Response: Read the accompanying messages for help in deciding what to do next.

DSNE950E DCLGEN DOES NOT SUPPORT THE lang LANGUAGE

Explanation: A DCLGEN user attempted to specify a LANGUAGE parameter, ‘lang’, that DCLGEN does not support.

System Action: DCLGEN processing terminates.

User Response: Correct the LANGUAGE parameter and resubmit the DCLGEN subcommand.

DSNE952I C DECLARATION FOR TABLE table-name

Explanation: This message is a part of normal DCLGEN output. It tells the name of the table for which the declaration was created.

System Action: This message is included in the DCGLEN output.

DSNE953I csect-name PRECISION OF DECIMAL COLUMN colname EXCEEDS THE MAXIMUM PRECISION FOR THE lang LANGUAGE.

Explanation: DCLGEN was building a COBOL or PL/I language declaration for a table when it encountered a decimal column with a precision greater than the precision supported by the language.

System Action: DCLGEN set the return code to 4 and processed the rest of the table.

User Response: This is a warning. Be aware that the declaration for column ‘colname’ causes a compiler error. You must edit the declaration before including it in an application program.
The USE OF THE DCLGEN COLSUFFIX(YES) OPTION WILL RESULT IN A MIXED FIELD NAME FOR COLUMN colname. The lang language does not support mixed field names.

Explanation: The COLSUFFIX(YES) option and a double-byte NAMES prefix were specified in a DCLGEN invocation, but column colname contains single-byte characters. This combination would result in a generated field name with a mixture of double-byte and single-byte characters, but the lang language does not support mixed field names.

System Action: DCLGEN set the return code to 4 and generated the field name as requested.

User Response: This is a warning. Be aware that the declaration for column colname causes a compiler error. You must edit the declaration before including it in an application program.

The COLSUFFIX(YES) option and an NAMES prefix were specified in a DCLGEN invocation, but column colname contains single-byte characters. This combination would result in a generated field name with a mixture of double-byte and single-byte characters, but the lang language does not support mixed field names.

Explanation: When COLSUFFIX(YES) is specified in a DCLGEN invocation, DCLGEN generates field names by concatenating the NAMES prefix with the column names. However, no NAMES prefix was specified.

System Action: DCLGEN set the return code to 4 and used the column names as field names.

User Response: This is a warning. Specify a NAMES prefix when you specify COLSUFFIX(YES).

A FIELD NAME PREFIX MUST BE SPECIFIED WHEN COLUMN SUFFIX VALUE IS YES.

Explanation: When YES is specified for the COLUMN SUFFIX field on the DCLGEN panel, DCLGEN generates field names by concatenating the value in the FIELD NAME PREFIX field with the column names. However, no value was specified for FIELD NAME PREFIX.

System Action: The DCLGEN panel generated this error message.

User Response: Specify a FIELD NAME PREFIX value, or change the COLUMN SUFFIX value to NO.

PARAMETER STRING EXCEEDS ALLOWABLE LIMIT OF 100 (DECIMAL) CHARACTERS

Explanation: The PARM option parameter-string of the RUN subcommand cannot exceed 100 (decimal) characters in length.

System Action: The TSO attachment facility is ready for more input.

User Response: Correct the PARM option and resubmit the job.

INVALID SYNTAX FOR keyword KEYWORD PARAMETER

Explanation: A parameter that does not follow DB2 naming conventions was specified for keyword.

System Action: Subcommand processing is terminated. The DSN command processor reissues the DSN prompt to allow you to enter another subcommand.

User Response: Correct the keyword parameter value in error, and resubmit the command. Refer to DB2 Command Reference for additional information about the specification of a package name and the REBIND/BIND PACKAGE/PLAN or FREE PACKAGE subcommand.

parameter_value IS NOT A VALID keyword KEYWORD PARAMETER

Explanation: The parameter_value is not a valid parameter value for the keyword.

System Action: Subcommand processing terminates. The DSN command processor reissues the DSN prompt to allow you to enter another subcommand.

User Response: Enter the corrected subcommand. Refer to DB2 Command Reference for additional information about the parameter values supported on the keyword.

connection_type KEYWORD OMITTED FROM THE ENABLE|DISABLE DECLARATION

Explanation: The ‘connection_type’ keyword was not specified in either the ENABLE or DISABLE keywords and is required if connection-names are specified for the ‘connection_type’.

Severity: 8

System Action: Subcommand processing is terminated. DSN command processor reissues the DSN prompt to allow you to enter another subcommand.

User Response: Enter the corrected subcommand. Refer to DB2 Command Reference for additional information about the connection type parameter values supported on the ENABLE and DISABLE keywords.

keyword_name KEYWORD CANNOT BE SPECIFIED MORE THAN ONCE PER RUN

Explanation: Either the BIND PACKAGE MEMBER or LIBRARY keywords specified more than one parameter value. Only one member or library name is permitted.

Severity: 8

System Action: Subcommand processing is terminated. DSN command processor will reissue the DSN prompt to allow another subcommand to be entered.

User Response: Enter the corrected subcommand. Refer to DB2 Command Reference for additional information regarding the BIND PACKAGE and BIND PLAN subcommands.
**DSNE969E**  
`csect-name keyword1 IS MUTUALLY EXCLUSIVE WITH keyword2`

**Explanation:** Both the PKLIST and NOPKLIST keywords, cannot be specified on one invocation of the REBIND PLAN subcommand. Both the ENABLE and DISABLE keywords cannot be specified on one invocation of the BIND/REBIND PLAN/PACKAGE subcommand.

**Severity:** 8

**System Action:** Subcommand processing is terminated. DSN command processor will reissue the DSN prompt to allow another subcommand to be entered.

**User Response:** Enter the corrected subcommand. Refer to `DB2 Command Reference` for additional information regarding the REBIND PLAN subcommand.

---

**DSNE970E**  
`EITHER MEMBER OR PKLIST MUST BE SPECIFIED, BOTH ARE ALSO ALLOWED`

**Explanation:** The BIND PLAN subcommand requires either the MEMBER or PKLIST keyword, and neither was specified. Either keyword or both may be specified.

**Severity:** 8

**System Action:** Subcommand processing is terminated. DSN command processor will reissue the DSN prompt to allow another subcommand to be entered.

**User Response:** Enter the corrected subcommand. Refer to `DB2 Command Reference` for additional information regarding the BIND PLAN subcommand.

---

**DSNE971E**  
`EITHER MEMBER OR COPY BUT NOT BOTH MUST BE SPECIFIED`

**Explanation:** The BIND PACKAGE subcommand requires either the MEMBER or COPY keyword; both are not allowed on the same subcommand invocation.

**Severity:** 8

**System Action:** Subcommand processing is terminated and the DSN command processor will reissue the DSN prompt to allow another subcommand to be entered.

**User Response:** Enter the corrected subcommand. Refer to `DB2 Command Reference` for additional information regarding the BIND PACKAGE subcommand.

---

**DSNE974E**  
`csect-name keyword1 KEYWORD IS INVALID WITH keyword2 KEYWORD.`

**Explanation:** The keyword2 should not be specified with keyword1.

**System Action:** Subcommand processing is terminated. The DSN command processor reissues the DSN prompt to allow another subcommand to be entered.

**User Response:** Modify one of the keywords on the command and resubmit the job. Refer to `DB2 Command Reference` for additional information about the BIND PACKAGE/PACKAGE subcommands.

---

**DSNE975E**  
`csect-name keyword KEYWORD IS ONLY VALID WHEN COPY KEYWORD IS PRESENT`

**Explanation:** A keyword was issued that may only be specified in conjunction with the COPY keyword.

**keyword** COPYVER or OPTIONS

**Severity:** 8

**System Action:** Subcommand processing is terminated. The DSN command processor will reissue the DSN prompt to allow another subcommand to be entered.

**User Response:** Enter the corrected subcommand. Refer to `DB2 Command Reference` for additional information regarding the BIND PACKAGE subcommand.

---

**DSNE976E**  
`LIBRARY KEYWORD IS ONLY VALID WHEN MEMBER KEYWORD IS PRESENT`

**Explanation:** The LIBRARY keyword may only be specified in conjunction with the MEMBER keyword.

**Severity:** 8

**System Action:** Subcommand processing is terminated. The DSN command processor will reissue the DSN prompt to allow another subcommand to be entered.

**User Response:** Enter the corrected subcommand. Refer to `DB2 Command Reference` for additional information regarding the BIND PACKAGE subcommand.

---

**DSNE999**  
`INVALID SQL RETURN CODE`

**Explanation:** The number you selected is not a valid SQL return code.

This message is issued by panel: DSN4SRS

**User Response:** Check the number and enter it again.
**DSNF001I** MESSAGE GENERATOR INITIALIZATION PARAMETERS NOT FOUND. DEFAULTS ASSUMED

**Explanation:** The message generator was unable to access the routing code initialization parameter defined by the DSN6SYSP macro. Default values defined by that macro are assumed.

**System Action:** Subsystem initialization continues.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** It might be necessary to change the DSN6SYSP macro and replace the DSN6SYSP member of the DSNIPARM directory. Refer to Section 2 of *DB2 Installation Guide* for details of this process.

---

**DSNF700I csect-name message-id HAS BEEN ISSUED**

**Explanation:** An unsuccessful attempt has been made to issue the message 'message-id'. This message is issued only if the requested message could not be found in the DB2 message directory.

**System Action:** The system proceeds as though the requested message had been issued.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Refer to this manual for actual message text. You need the message number ('message-id'). If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.
DSNH... Messages

Message line numbers

The line number nnnn in the following compiler messages is generated by assigning sequential numbers to the original source. The numbers are printed on the SQL precompiler source listing (if the SOURCE option is specified to the precompiler).

'COL cc' in the messages identifies the source column in which the condition was detected. This is usually the location of the column containing the first character of the associated source token. However, if the precompiler cannot determine this location, it is the beginning of the statement. Because the detected error might be similar to a valid, but different, construction, the SQL parsing might indicate the wrong location for the error.

Message severity codes

One of the characters I, W, E, S, or U is shown at the beginning of each precompiler message as an aid to the programmer. These characters indicate the severity level as follows:

<table>
<thead>
<tr>
<th>Character</th>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>0</td>
<td>Informational</td>
</tr>
<tr>
<td>W</td>
<td>4</td>
<td>Warning</td>
</tr>
<tr>
<td>E</td>
<td>8</td>
<td>Error</td>
</tr>
<tr>
<td>S</td>
<td>12</td>
<td>Severe error</td>
</tr>
<tr>
<td>U</td>
<td>16</td>
<td>Unrecoverable error</td>
</tr>
</tbody>
</table>

When unsupported non-DB2 statements are detected during SQL(ALL) precompilation, the return code will be forced to 4 if the return code was 8, and no host-related errors were detected. This is done so that the application can proceed with the compilation and link-edit steps. This allows the syntax checking to be delayed until bind. If a severity 8 precompiler error message is not a host-related error, the precompiler treats the error as a warning and place a W instead of an E in the precompiler output listing. In this instance, the precompiler also issues DSNH049I to indicate that the actual return code 8 from the precompiler was changed to 4.

The following precompiler messages with severity levels of 8 are not changed from errors to warnings when SQL(ALL) is in effect:

- DSNH051I
- DSNH080I
- DSNH290I
- DSNH291I
- DSNH292I
- DSNH312I
- DSNH313I
- DSNH314I
- DSNH504I

Source tokens in messages

Tokens from your source program do not always appear in messages exactly as they appear in your program. For example, leading zeros are removed from integer tokens.

When unsupported non-DB2 statements are detected during SQL(ALL) precompilation, the return code will be forced to 4 if the return code was 8, and no host-related errors were detected. This is done so that the application can proceed with the compilation and link-edit steps. This allows the syntax checking to be delayed until bind. If a severity 8 precompiler error message is not a host-related error, the precompiler treats the error as a warning and place a W instead of an E in the precompiler output listing. In this instance, the precompiler also issues DSNH049I to indicate that the actual return code 8 from the precompiler was changed to 4.

The following precompiler messages with severity levels of 8 are not changed from errors to warnings when SQL(ALL) is in effect:

- DSNH051I
- DSNH080I
- DSNH290I
- DSNH291I
- DSNH292I
- DSNH312I
- DSNH313I
- DSNH314I
- DSNH504I

Source tokens in messages

Tokens from your source program do not always appear in messages exactly as they appear in your program. For example, leading zeros are removed from integer tokens.
DSNH005I  U csectname FILE ddname NO MEMBER NAME SPECIFIED
Explanation: The ddname must refer to a partitioned data set, and the member name must be specified in the allocation. This helps to prevent accidental erasure of the DBRM library.
Severity:  16 (unrecoverable error)
System Action: The precompiler is terminated.
User Response: Correct the JCL or TSO allocate command to specify a member name.

DSNH006I  U csectname FILE ddname COULD NOT BE OPENED
Explanation: The file identified in the message is required, but it could not be opened.
Severity:  16 (unrecoverable error)
System Action: The precompiler is terminated.
User Response: Ensure that the file is present in your JCL.

DSNH007I  E csectname LINE nnnn COL cc ILLEGAL CHARACTER IGNORED: c (\'hh\'X)
Explanation: The character identified in the message as c is not permitted. The hexadecimal representation for the character is hh.
Severity:  8 (error)
System Action: The character is ignored.
User Response: Correct the character. It might need to be within quotation marks or apostrophes.

DSNH008I  S csectname LINE nnnn COL cc NESTED INCLUDE NOT SUPPORTED
Explanation: While processing an INCLUDE, another nested INCLUDE statement was encountered.
Severity:  12 (severe error)
System Action: The nested INCLUDE statement is ignored.
User Response: Remove the nested INCLUDE statements; they are not allowed in an included file. The DB2 precompiler permits only one level of INCLUDE statements.

DSNH009I  S csectname LINE nnnn COL cc MEMBER NAME COULD NOT BE INCLUDED
Explanation: The identified member name was not found or could not be read.
Severity:  12 (severe error)
System Action: Processing continues without the data from that member.
User Response: Ensure that the member is in the library and that its name is spelled correctly. Check and correct any JCL errors. They are likely to cause other errors. Ensure that the data set and library parameters are correct.

DSNH010I  S csectname LINE nnnn COL cc UNTERMINATED STRING CONSTANT BEGINNING text
Explanation: The constant identified in the message as 'text' is not terminated properly.
Severity:  12 (severe error)
System Action: The string is treated as if it were terminated by the end of file.
User Response: Terminate the string constant. Check for and correct any missing or extra quotation marks and apostrophes. These errors are likely to cause others. Some statements were probably missed because of missing or extra string delimiters.

DSNH011I  S csectname LINE nnnn COL cc UNTERMINATED COMMENT
Explanation: A comment is not terminated properly. This message is only issued for HOST(PLI) and HOST(C).
Severity:  12 (severe error)
System Action: The string is treated as if it were terminated by the end of file.
User Response: Ensure that the comment terminator is typed properly and that it is within the specified margins. This error is likely to cause others. Some statements were probably missed because of the missing comment terminator.

DSNH012I  W csectname LINE nnnn COL cc INVALID CONTINUATION
Explanation: The continuation does not follow the host language rules.
Severity:  4 (warning)
System Action: Processing continues. Additional errors might result.
User Response: Follow the host language continuation rules and embedded SQL continuation rules. Check the margin option. This error is most common in assembler language in cases where a continuation begins before the continuation column (the continuation column is column 16 by default).

DSNH013I  E csectname LINE nnnn COL cc SQL STATEMENT FOUND OTHER THAN IN THE FIRST PROGRAM (OR MAIN PROGRAM)
Explanation: This message is for VS COBOL II only. If any SQL statement is found in the source after the first program in a BATCH COMPILe or the end of the main program of a nested program, this message is issued.
Severity:  8 (error)
System Action: The precompiler is terminated.
User Response: Move up the SQL statement and corresponding host variable declaration to the main program or to the first program and resubmit the job.
**Explanation:** If any SQL statement is found in the COBOL DECLARATIVES section, this message is issued.

**Severity:** 12 (severe error)

**System Action:** Processing continues. Additional errors might result.

**User Response:** Move the SQL statement out of the COBOL DECLARATIVES section and resubmit the job.

**Explanation:** The required character or keyword identified as token is missing.

**Severity:** 8 (error)

**System Action:** The token is assumed to be present in order to continue checking the statement syntax.

**User Response:** Correct the SQL statement. Determine if you skipped either this keyword or another keyword earlier in the SQL statement. The assumed token is printed in the SYSTEM error message. This token might not be what you intended, even though it is the only symbol allowed in the clause at this point.

**Explanation:** The specified option requires a suboption, but one was not provided.

**Severity:** 4 (warning)

**System Action:** The option is ignored.

**User Response:** Provide a suboption or remove the option. This problem might cause additional errors if the HOST or MARGINS option is needed but not specified. The other options are either defaults or affect only the listing. Correct the problem and run the precompile again.

**Explanation:** The host language does not permit the specified margins.

**Severity:** 4 (warning)

**System Action:** The MARGINS option is ignored.

**User Response:** Ensure that the source statements are within the proper margins and that the margins are specified correctly. The margins for COBOL must be 8, 72. The margins for FORTRAN must be 1, 72.

**Explanation:** The version ID is greater than numofchars bytes long. The maximum length for the version ID is 64 bytes.

**Severity:** 4 (warning)

**System Action:** The option is honored, but the version ID is truncated after 64 bytes.

**User Response:** Refer to the 'options used' list in the precompiler output to see what version ID was used.
DSNH028I  W csectname ATTACH SUBOPTION suboption
NOT PERMITTED WITH HOST (FORTRAN) SPECIFIED.

Explanation:  The identified suboption for precompiler option
ATTACH cannot take effect when the application is a
FORTRAN application because the interface code for
FORTRAN is always DSNHFT.

Severity:    4 (warning)
System Action:  The option is ignored.
User Response:  None is required. However, you can either
code ATTACH(TSO) or specify no ATTACH precompiler option

---

DSNH030I  W csectname LINE nnnn COL cc STATEMENT
CONTAINS WRONG NUMBER OF ‘INTO’ VARIABLES

Explanation:  The number of variables specified in an INTO
clause is not the same as the number of select-list elements
(taking into account expansion of host structures and ‘*‘ or
‘table,‘‘ select entries according to the declarations supplied).

Severity:    4 (warning)
System Action:  Processing continues.
User Response:  Ensure the included table declarations are
correct. If the declarations are correct, this statement causes
an error when the application program is bound. If the decla-
ations are incorrect, you can proceed, but the declarations
should be corrected. Otherwise, you need to correct the SQL
statement and precompile again.

---

DSNH031I  W csectname LINE nnnn COL cc STATEMENT
CREATES A COLUMN WITH NAME name1
WHICH DOES NOT MATCH DECLARED NAME name2

Explanation:  The column name specified in a CREATE state-
ment (name1) is not the same as the name of the corre-
sponding column in the DECLARE TABLE statement (name2).

Severity:    4 (warning)
System Action:  Processing continues.
User Response:  Ensure that the DECLARE TABLE matches
the CREATE TABLE. You can use the cross-reference and
source listings to help find the two statements.

---

DSNH032I  W csectname LINE nnnn COL cc STATEMENT
CREATES A COLUMN name whose attributes DO NOT MATCH THE DECLARATION

Explanation:  The column name is specified in a CREATE
statement with a different data type or length than was speci-
fied for the corresponding column in the DECLARE TABLE
statement.

Severity:    4 (warning)
System Action:  Processing continues.
User Response:  Correct the DECLARE TABLE or CREATE
TABLE statement. If the DECLARE TABLE statement is incor-
rect, some warnings might also be incorrect or might not be
generated when needed. If the CREATE TABLE statement is
incorrect, you must correct it.

---

DSNH033I  W csectname LINE nnnn COL cc STATEMENT
CREATES MORE OR LESS COLUMNS THAN WERE DECLARED

Explanation:  The number of columns specified in a CREATE
statement is different from the number of columns specified in
the DECLARE TABLE statement.

Severity:    4 (warning)
System Action:  Processing continues.
User Response:  Ensure that the DECLARE TABLE matches
the CREATE TABLE. If the DECLARE TABLE statement is incor-
rect, some warnings might also be incorrect or might not be
generated when needed. If the CREATE TABLE statement is
incorrect, you must correct it.

---

DSNH034I  W csectname LINE nnnn COL cc STATEMENT
INSERTS MORE OR LESS VALUES THAN THE NUMBER OF COLUMNS DECLARED

Explanation:  The number of values specified in an INSERT
statement is different from the number of columns specified in
the DECLARE TABLE statement for the receiving table.

Severity:    4 (warning)
System Action:  Processing continues.
User Response:  Insert the correct number of values. If the
DECLARE TABLE statement is incorrect, this warning might
also be incorrect. If the INSERT statement is incorrect, you
must correct it.

---

DSNH038I  S csectname LINE nnnn COL cc PROGRAM OR SUBPROGRAM CONTAINS MORE THAN 32767 SQL STATEMENTS

Explanation:  The number of SQL statements in an application
program or a FORTRAN subprogram is greater than
32767.

Severity:    12 (severe error)
System Action:  The precompiler terminates.
User Response:  Divide the application program or subpro-
gram into smaller programs or reduce the SQL statements in
each program unit so that the maximum number of SQL state-
ments is not exceeded.
**DSNH041I W** csectname OPTION: MISSING HOST OPTION

Explanation: The host language was not specified in the OPTION field.

Severity: 4 (warning)

System Action: HOST(COBOL) is assumed.

User Response: Specify the host language if it is not COBOL. It is probably best to specify the host language and remove all warnings.

**DSNH042I W** csectname OPTION: option OPTION INVALID FOR HOST LANGUAGE

Explanation: The option identified in the message is not valid. The QUOTE and COMMA options are not permitted with HOST(ASM), HOST(PLI), or HOST(C). The TWOPASS option is not permitted with HOST(COBOL).

Severity: 4 (warning)

System Action: The specified option is ignored.

User Response: Remove the invalid option, or correct the host specification.

**DSNH049I W** csectname RETURN CODE IS FORCED TO 4 BECAUSE OPTION SQL(ALL) IS IN EFFECT, ORIGINAL RETURN CODE WAS nnn

Explanation: One or more SQL-related error messages were detected by the precompiler, but because of option SQL(ALL), the return code is forced to 4 in order to let the application proceed with compilation.

The SQL syntax checking is deferred until bind time because the source might contain non-DB2 SQL syntax that the DB2 precompiler does not recognize and flags as an error. The DBRM produced by this precompilation cannot be bound successfully by DB2 if there are SQL syntax errors or non-DB2 SQL syntax.

The return code remains untouched if there are host-related syntax or semantic errors in the source.

Severity: 4 (warning)

System Action: Processing continues.

User Response: Ensure that the intention of this precompilation is for executing it in a non-DB2 system.

**DSNH050I I** csectname WARNINGS HAVE BEEN SUPPRESSED DUE TO LACK OF TABLE DECLARATIONS

Explanation: One or more warning messages were suppressed because no table declarations were found before the first SQL statement that referenced a table or column.

Severity: 0

System Action: Processing continues. Suppression is discontinued if a table declaration is found.

User Response: Insert (or INCLUDE) table declarations before they are referenced in order to permit table and column checking.

**DSNH051I E** csectname LINE nnnn COL cc sqltype name PREVIOUSLY DECLARED OR REFERENCED

Explanation: The variable sqltype is TABLE, CURSOR, or STATEMENT. The identifier name was already defined with the given sqltype. The definition might have occurred implicitly. For example, name might have been found in the FROM clause of a SELECT, causing it to be defined as a table.

Severity: 8 (error)

System Action: The name is installed in the symbol table as a duplicate.

User Response: Remove duplicate definitions, or correct the references. Avoid implicit definitions by inserting (or including) table declarations before they are referenced. Check the number of passes used. Use the cross-reference and source listings to help resolve this type of error.

**DSNH052I E** csectname LINE nnnn COL cc COLUMN name IS ALREADY DEFINED IN TABLE table-name

Explanation: The identified name is already defined as a column in the table named table-name. The definition might have occurred implicitly. For example, table-name might have been found in a select-list, causing name to be defined as a column within table-name if table-name was not declared as a host variable.

Severity: 8 (error)

System Action: The name is installed in the symbol table as a duplicate.

User Response: Remove duplicate definitions, or correct the references. Avoid implicit definitions by inserting (or including) table declarations before they are referenced.

**DSNH053I W** csectname NO SQL STATEMENTS WERE FOUND

Explanation: No SQL statements were found in the precompiler input file. An empty DBRM member was written.

Severity: 4 (warning)

System Action: Processing continues.

User Response: If you embedded SQL statements in your application program and none were found, make sure your column margins are properly defined for your application program.

**DSNH060I E** csectname LINE nnnn COL cc INVALID type SPECIFICATION: spec

Explanation: The type is either SCALE or LENGTH. The spec is the given SCALE or LENGTH specification in an SQL declaration. Length and scale specifications must be unsigned integers. The scale specification, where permitted, cannot exceed the length. The length specification cannot be 0.

Severity: 8 (error)

System Action: Processing continues.

User Response: Correct the length or scaling.
Messages and Codes

**DSNH080I** E csectname LINE nnnn COL cc usage VARIABLE name IS NOT type TYPE

**Explanation:** The usage is INDICATOR or STRING. The type is SMALLINT, VARCHAR, or CHARACTER. The data type of the variable name is not acceptable. All indicator variables must be small integers. PREPARE and EXECUTE strings must be variable character strings, except for FORTRAN, which requires character type.

**Severity:** 8 (error)

**System Action:** If the containing SQL statement is a declaration, it is discarded. If the containing SQL statement is executable, it is replaced by host language statements that will, if executed, set an error code in the SQLCA.

**User Response:** Specify a host variable of the proper type.

**DSNH081I** W csectname LINE nnnn COL cc STATEMENT DOES NOT CONFORM TO ANS SYNTAX STANDARD - REASON CODE ccc

**Explanation:** When the precompiler option STDSQL(YES) is in effect, the SQL syntax is checked to see if it conforms to the ANSI/ISO SQL standard of 1992. Reason codes are:

000 Column function with DISTINCT as an arithmetic-operation operand does not conform to the ANSI/ISO SQL standard of 1992.

001 FOR UPDATE OF as part of a DECLARE CURSOR statement does not conform to the ANSI/ISO SQL standard of 1992.

**Severity:** 4 (warning)

**System Action:** Processing continues.

**User Response:** You have the option of changing or not changing the syntax to conform to the ANSI syntax standard.

**System Programmer Response:** Check the SQL statement.

**DSNH082I** I csectname LINE nnnn COL cc STATEMENT DOES NOT CONFORM TO IBM SQL SYNTAX OR SEMANTIC STANDARD - REASON CODE ccc

**Explanation:** When the precompiler option SQL(ALL) is in effect, statements that do not conform to certain IBM SQL rules are flagged.

**Severity:** 0 (informational)

**System Action:** Processing continues.

**User Response:** Change the syntax of the statement to conform to the IBM SQL standard if portability is required. Not changing the syntax means that the program is less portable within the IBM SQL environment.

**DSNH083I** I csectname LINE nnnn COL cc IBM SQL RESERVED WORD ibmkeywd SPECIFIED AS AN IDENTIFIER NAME

**Explanation:** When the precompiler option SQL(ALL) is in effect, IBM SQL reserved words should not be used as identifier names. Using IBM SQL reserved words limits the portability of the statement.

**Severity:** 0 (informational)

**DSNH084I** W csectname LINE nnnn COL cc UNACCEPTABLE SQL STATEMENT

**Explanation:** The referenced SQL statement is not allowed in this situation, but it will not cause an error. Depending on the option specified at precompile time, one of the following occurred:

- The BEGIN DECLARE SECTION(*), END DECLARE SECTION(*), and UPDATE STATISTICS statements are flagged as not compatible.
  - For C applications, BEGIN and END DECLARE SECTION are not flagged.
  - For other languages, the statement is only allowed with precompiler option STDSQL(YES).
- Using the STDSQL(YES) precompiler option, the INCLUDE SQLCA statement is flagged as a warning.

**Severity:** 4 (warning)

**System Action:** The BEGIN DECLARE SECTION, END DECLARE SECTION, and INCLUDE SQLCA statements are ignored. The other statements are replaced by host language statements that will, if executed, set a warning code or SQLCODE -84 in the SQLCA.

**User Response:** Unless this application program is used in a portable manner, remove the statement.

**DSNH085I** W csectname LINE nnnn COL cc UNACCEPTABLE SQL KEYWORD IGNORED: keyword

**Explanation:** The SQL keyword is not allowed by DB2, but it does not cause an error. This message is printed as a warning to the programmer.

**Severity:** 4 (warning)

**System Action:** The keyword and its parameters are ignored.

**User Response:** Unless this application program is used with both SQL/DS and DB2, remove the keyword.

**DSNH088I** W csectname LINE nnnn COL cc THIS STATEMENT WILL action AN ENTIRE TABLE

**Explanation:** The action is either DELETE or UPDATE. The referenced SQL statement has no WHERE clause and will delete or update all rows of the specified table. This message is printed as a warning to the programmer.

**Severity:** 4 (warning)

**System Action:** Processing continues.

**User Response:** Be sure that you intend to delete or update all rows, or add a suitable WHERE clause.
**Explanation:** Host variable references are not permitted in this type of SQL statement. The name is invalid.

**Severity:** 12 (severe error)

**System Action:** The statement is replaced by host language statements that will, if executed, set an error code in the SQLCA.

**User Response:** Specify a literal or a column name rather than a host variable. The colon (:) indicates that the name that follows is a host variable. Remove it to specify a column name.

---

**Explanation:** The statement cannot be executed because it exceeds the system limits for either length or complexity.

**Severity:** 16

**System Action:** The statement cannot be executed.

**User Response:** Break the statement into shorter or less complex SQL statements.

---

**Explanation:** The referenced character string literal (beginning with string in the message) is too long. Up to 255 characters or 124 graphic characters are permitted. Two consecutive string delimiters are used to represent one string delimiter within the character string, but these count as 2 bytes when calculating the lengths of character string constants. For SET CURRENT PACKAGESET, up to 18 characters are allowed; for SET CURRENT SQLID, up to 8 characters are allowed; for SET CURRENT OPTIMIZATION HINT, only one character is allowed; for SET CURRENT LOCALE, up to 50 characters are allowed.

**Severity:** 8 (error)

**System Action:** If the SQL statement containing the string is a declaration, it is discarded. If the containing SQL statement is executable, it is replaced by host language statements that will, if executed, set an error code in the SQLCA.

**User Response:** Correct the string. If a shorter string is acceptable, reduce the length of the literal. If a long string is required, a host variable is required.

---

**Explanation:** The token was found. It begins with a digit, but it is not a valid integer, decimal, or float literal. Identifiers cannot begin with a digit except for the WHENEVER statement with HOST(FORTRAN), and the identifiers in COBOL.

**Severity:** 8 (error)

**System Action:** If the containing SQL statement is a declaration, it is discarded. If the containing SQL statement is executable, it is replaced by host language statements that will, if executed, set an error code in the SQLCA.

**User Response:** Check the indicated token for validity. Use apostrophes or quotation marks if a character literal is desired. Remove the invalid characters if a number is desired.
- Table space names
- Application plans
- Database request modules (DBRMs)
- Referential constraint names specified in CREATE or ALTER TABLE statements.
- Package-id

Host variable names cannot contain more than 64 characters.
Volume serial numbers cannot contain more than 6 characters.

Severity: 8 (error)

System Action: If the SQL statement containing the problem is a declaration, it is discarded. If the SQL statement containing the problem is executable, it is replaced by host language statements that will, if executed, set an error code in the SQLCA.

User Response: Correct the name length.

---

### DSNH109I E csectname LINE nnnn COL cc type CLAUSE NOT PERMITTED

| Explanation:  
The type is INTO, ORDER BY, FOR UPDATE, , USING, LARGE, or CORRELATION NAME.  

| Embedded SELECT statements cannot include ORDER BY, because the result cannot be more than a single row.  
| Embedded SELECT statements cannot include FOR UPDATE OF, because position is not retained.  
| SELECT clauses used in cursor declarations or subselects cannot have an INTO clause because the INTO is on the FETCH statement.  
| CREATE VIEW statements cannot include any of the above clauses.  
| The UNION operator is not allowed in an embedded SELECT.  
| A CREATE TABLESPACE statement cannot specify LOCKPART without the NUMPARTS option.  
| An ALTER TABLESPACE statement cannot specify LOCKPART for a non-partitioned table space.  
| A table space with LOCKPART YES cannot be altered to LOCKSIZE TABLESPACE.  
| A table space with LOCKSIZE TABLESPACE cannot be altered to LOCKPART YES.  
| The LARGE clause without the NUMPARTS option is not allowed in a CREATE TABLESPACE statement.  
| The DESCRIBE INPUT statement can not have USING clause.  
| The table being updated in a POSITIONED UPDATE statement can not be assigned a correlation name.  

Severity: 8 (error)

System Action: If the containing SQL statement is a declaration, it is discarded. If the containing SQL statement is executable, it is replaced by host language statements that will, if executed, set an error code in the SQLCA.

User Response: Remove the clause. You might need to use a cursor to perform the processing. The ORDER and FOR UPDATE clauses are accepted on the DECLARE CURSOR statement. The INTO clause is accepted on the FETCH statement. The LARGE clause is accepted on a CREATE TABLESPACE statement with the NUMPARTS option.

---

### DSNH110I E csectname LINE nnnn COL cc INVALID HEX LITERAL BEGINNING string

**Explanation:** The referenced hexadecimal literal contains one or more characters that are not valid hexadecimal numbers.

**Severity:** 8 (error)

**System Action:** If the containing SQL statement is a declaration, it is discarded. If the containing SQL statement is executable, it is replaced by host language statements that will, if executed, set an error code in the SQLCA.

**User Response:** Correct the literal.

---

### DSNH111W W csectname LINE nnnn COL cc THE SUBPAGES OPTION IS NOT SUPPORTED FOR TYPE 2 INDEXES

**Explanation:** You cannot use the SUBPAGES option for type 2 indexes.

**Severity:** 4 (warning)

**System Action:** The option is ignored; processing continues.

**Programmer Response:** Remove the SUBPAGES option to get rid of the warning.

---

### DSNH113I E csectname LINE nnnn COL cc INVALID CHARACTER FOUND IN string, REASON CODE - nnn

**Explanation:** The string contains an invalid character. It can be an SQL ordinary identifier name, a host variable name, or a DBCS comment.

For SBCS SQL ordinary identifiers, names of buffer pools, databases, plans and storage groups must contain only uppercase alphabetic or national characters and numerics when CHARSET is KATAKANA; the first character must be alphabetic or national.

The following reason codes apply to SBCS identifiers:

- **000** An invalid character was found in the SBCS identifier (including the case in which a DBCS identifier was used where only an SBCS identifier is allowed.)

The following reason codes apply to DBCS identifiers or comments:

- **101** An odd number of bytes exists between the shift-out and the shift-in character.
- **102** Either a shift-in or shift-out character is missing.
- **103** DBCS blanks X'4040' are not allowed.
- **104** There are no characters between the shift-out and the shift-in characters.
- **105** Shift-out cannot be the first byte of the DBCS character between the shift-out and the shift-in characters.

**Severity:** 8 (error)

**System Action:** Processing is terminated.

**User Response:** Correct the name.
**DSNH115I**  
E csectname LINE nnnn COL cc ILLEGAL USE OF COMPARISON OPERATOR operator  
Explanation: The syntax is not correct for this type of comparison. A simple comparison such as ‘<’ must not be followed by a list of items. The ANY and ALL comparisons must precede a subselect, rather than an expression or a list of items.  
Severity: 8 (error)  
System Action: If the containing SQL statement is a declaration, it is discarded. If the containing SQL statement is executable, it is replaced by host language statements that will, if executed, set an error code in the SQLCA.  
User Response: Correct the syntax. If necessary, refer to Chapter 3 of DB2 SQL Reference for the correct syntax.

**DSNH117I**  
E csectname LINE nnnn COL cc STATEMENT INSERTS THE WRONG NUMBER OF VALUES  
Explanation: The number of entries in a value-list is not the same as the number of columns specified in an INSERT statement.  
Severity: 8 (error)  
System Action: Processing continues.  
User Response: Correct the syntax. If necessary, refer to Chapter 6 of DB2 SQL Reference for the correct syntax.

**DSNH120I**  
E csectname LINE nnnn COL cc FUNCTION USAGE NOT PERMITTED: fname  
Explanation: A WHERE clause or SET clause contains a column function, possibly as a result of a reference to a column that is derived from a column function in a view definition. A column function is allowed in a WHERE clause only if that clause appears within a subquery of a HAVING clause.  
Severity: 8 (error)  
System Action: If the containing SQL statement is a declaration, it is discarded. If the containing SQL statement is executable, it is replaced by host language statements that will, if executed, set an error code in the SQLCA.  
User Response: Correct the syntax. A subselect clause might be needed to produce the function result. If necessary, refer to Chapter 5 of DB2 SQL Reference for the correct syntax.

**DSNH126I**  
E csectname LINE nnnn COL cc ORDER BY CLAUSE CANNOT BE USED WITH A FOR UPDATE OF CLAUSE  
Explanation: The ORDER BY clause makes the cursor incapable of being updated.  
Severity: 8 (error)  
System Action: The cursor declaration is discarded.  
User Response: This is a DB2 restriction. You can have either an ordered cursor or a cursor that can be updated. You cannot specify both attributes for the same cursor. You might need to change your application logic.

**DSNH129I**  
E csectname LINE nnnn COL cc TOO MANY TABLES SPECIFIED IN SQL STATEMENT  
Explanation: In a subselect, (including all subqueries), there can be no more than 225 references to table names.  
Severity: 8 (error)  
System Action: If the containing SQL statement is a declaration, it is discarded. If the containing SQL statement is executable, it is replaced by host language statements that will, if executed, set an error code in the SQLCA.  
User Response: Reduce the number of table references in each subselect. Each reference to a single table counts separately. The count only applies to table/view references in the FROM list. Each view is only counted one time. Refer to Chapter 5 of DB2 SQL Reference for the definition of a subselect.

**DSNH130I**  
E csectname LINE nnnn COL cc THE ESCAPE CLAUSE ‘x’ CONSISTS OF MORE THAN ONE CHARACTER  
Explanation: The literal x used in the ESCAPE clause is too long. Only one SBCS or one DBCS character is allowed.  
Severity: 8 (error)  
System Action: The corresponding SQL statement is replaced by host language statements that will, if executed, set an error code in the SQLCA.  
User Response: Correct the string. The literal string for the ESCAPE clause can only be one SBCS or DBCS character.

**DSNH131I**  
E csectname LINE nnnn COL cc STATEMENT WITH LIKE PREDICATE HAS INCOMPATIBLE DATA TYPES  
Explanation: If the column name at the left of LIKE or NOT LIKE is a character type, the expression at the right must be a character type. If the column name is a graphic type, the expression at the right must be a graphic type.  
Severity: 8 (error)  
System Action: The statement is ignored.  
User Response: Check the data type of every operand.
DSNH132I  E  csectname  LINE  nnnn  COL  cc  INVALID  LIKE  PREDICATE

Explanation:  The value following LIKE must be an alphanumeric host variable or literal, graphic host variable or literal, or special character literal.

Severity:  8  (error)

System Action:  If the containing SQL statement is a declaration, it is discarded. If the containing SQL statement is executable, it is replaced by host language statements that will, if executed, set an error code in the SQLCA.

User Response:  Correct the syntax. If necessary, refer to Chapter 3 of DB2 SQL Reference for the correct syntax.

DSNH142I  E  csectname  LINE  nnnn  COL  cc  THE SQL STATEMENT IS NOT SUPPORTED

Explanation:  The token was found. An SQL statement was detected that is not supported by the database. The statement might be valid for other IBM relational database products or it might be valid in another context. For example, statements such as VALUES and SIGNAL SQLSTATE can appear only inside a trigger.

Severity:  8  (error)

System Action:  The SQL statement is replaced by host language statements that will, if executed, set an error code in the SQLCA.

User Response:  Change the syntax of the SQL statement or remove the statement from the program.

DSNH170I  E  csectname  LINE  nnnn  COL  cc  NUMBER OF ARGUMENTS SPECIFIED FOR function-name IS INVALID

Explanation:  An SQL statement specified the scalar function function-name with either too many or too few arguments.

Severity:  8  (error)

System Action:  If the containing SQL statement is a declaration, it is discarded. If the containing SQL statement is executable, it is replaced by host language statements that will, if executed, set an error code in the SQLCA.

User Response:  Correct the function call. Refer to Chapter 4 of DB2 SQL Reference for information about the number of arguments required by the scalar function function-name.

DSNH171I  E  csectname  LINE  nnnn  COL  cc  THE DATA TYPE, LENGTH, OR VALUE OF ARGUMENT nn OF function-name IS INVALID

Explanation:  Either the data type, the length or the value of argument nn of scalar function function-name is incorrect.

Severity:  8  (error)

System Action:  If the containing SQL statement is a declaration, it is discarded. If the containing SQL statement is executable, it is replaced by host language statements that will, if executed, set an error code in the SQLCA.

User Response:  Correct the argument. Refer to Chapter 4 of DB2 SQL Reference for rules for each argument of the scalar function function-name.

DSNH182I  E  csectname  LINE  nnnn  COL  cc  AN ARITHMETIC EXPRESSION WITH A DATETIME VALUE IS INVALID

Explanation:  The specified arithmetic expression contains an improperly used date/time value or labeled duration.

Severity:  8  (error)

System Action:  If the containing SQL statement is a declaration, it is discarded. If the containing SQL statement is executable, it is replaced by host language statements that will, if executed, set an error code in the SQLCA.

User Response:  Correct the indicated expression. Refer to Chapter 3 of DB2 SQL Reference for the rules for date/time arithmetic.

DSNH184I  E  csectname  LINE  nnnn  COL  cc  AN ARITHMETIC EXPRESSION WITH A DATETIME VALUE CONTAINS A PARAMETER MARKER

Explanation:  The specified expression contains a parameter marker improperly used with a date/time value.

Severity:  8  (error)

System Action:  If the containing SQL statement is a declaration, it is discarded. If the containing SQL statement is executable, it is replaced by host language statements that will, if executed, set an error code in the SQLCA.

User Response:  Correct the indicated expression. Refer to Chapter 3 of DB2 SQL Reference for information about date/time arithmetic.

DSNH198I  E  csectname  LINE  nnnn  COL  cc  EMPTY SQL STATEMENT IGNORED

Explanation:  The referenced SQL statement has no text between the EXEC SQL and the statement terminator.

Severity:  8  (error)

System Action:  The statement is ignored.

User Response:  Correct the statement, or remove it.

DSNH199I  E  csectname  LINE  nnnn  COL  cc  INVALID KEYWORD keyword; VALID SYMBOLS ARE: token list

Explanation:  A syntax error was detected at the keyword specified in the message. As an aid to the programmer, a partial list of valid tokens is provided in the message. Only those tokens that fit are listed. The error might be earlier in the statement, but the syntax of the statement appears to be valid up to this point.

Severity:  8  (error)

System Action:  If the containing SQL statement is a declaration, it is discarded. If the containing SQL statement is executable, it is replaced by host language statements that will, if executed, set an error code in the SQLCA.

User Response:  Check the SQL statement in the area of the indicated keyword. A colon or SQL delimiters might be missing. Correct the SQL statement.
**Explanation:** The column \textit{column name} was referenced without sufficient qualification. Type checking cannot be done.

**Severity:** 4 (warning)

**System Action:** Processing continues.

**User Response:** If the table declares are correct and the column name is not unique, this creates an error in the BIND step. Correct the DECLARE TABLE statement, or use the correct table name to qualify the column name.

---

**Explanation:** The table definition was not provided. It is optional, but checking cannot be done without the table information. (BIND checks against the actual table during later processing.)

**Severity:** 4 (warning)

**System Action:** Processing continues.

**User Response:** Check the spelling of the table name. Ensure that all the tables needed were specified in the statement.
If you intended to use a host variable, only a subset of the possible variable declarations are valid for use as a DB2 host variable. The rules for host variables are listed in the application programming guides. Use the cross-reference listing and precompiler source listing to determine the source of the problem.

- If you use the STDSQL(YES) option for the precompilation, make sure that all of the host variable declarations are declared within BEGIN/END DECLARE SECTIONS.
- If the cross-reference listing does not contain the host variable name, the declaration is missing. If the source for a declaration is present, a missing terminator from a comment or from a string might cause this type of error. The margins could also cause this type of error.
- If the name is present, but the data type is not listed, the host variable is not usable; it does not follow the rules outlined for valid host variable definitions.
- If several definitions exist for the name, the first reference might occur before the definition. The use of the TWOPASS option helps by processing DECLARE statements before the other types of statements. However, host variable declarations and cursor declarations are processed in the same pass. The host variables referenced in cursor declarations must be defined before the cursor is defined in the application program.
  - A parameter marker is expected rather than a host variable in an EXECUTE IMMEDIATE statement.
  - The data type of a host variable passed in a CALL statement is not character or varying character.
  - The length attribute of a character or varying character host variable passed in a CALL statement exceeds 255 characters.

### DSNH330I

**W csectname LINE nnnn COL cc STATEMENT SELECTS INCOMPATIBLE DATA TYPE INTO hostvar**

**Explanation:** The data type of host variable hostvar is not compatible with the apparent type of the corresponding select expression. One of them is numeric and the other is character, or one of them is character and the other is graphic. If the select expression is a column reference, the data type is obtained from its declaration.

**Severity:** 4 (warning)

**System Action:** Processing continues.

**User Response:** Ensure that the table definitions are current and that the host variable has the proper data type.

**System Programmer Response:** Ensure that the table definitions are current, and that the host variable has the proper data type.

### DSNH310I

**W csectname LINE nnnn COL cc language HOST VARIABLE name WAS DECLARED IN location**

**Explanation:** Host variable name should not be declared in this location of the source program. This message is issued only at reference time.

**Severity:** 4 (warning)

**System Action:** Processing continues.

**User Response:** If this host variable is used, the user assumes responsibility for possible exposure of incorrect output. Refer to Section 3 of DB2 Application Programming and SQL Guide to determine where host variables can be validly declared.

Declaring a COBOL host variable in the File Section might lead to incorrect output from SQL statements or abend 04E with RC=00E7000C.

### DSNH312I

**E csectname LINE nnnn COL cc UNDEFINED OR UNUSABLE HOST VARIABLE name**

**Explanation:** The name in the message is used in an SQL statement, but either no declaration was found in the application program so far, or the attributes are improper for this use. Declarations for host variables used in a DECLARE CURSOR statement must precede the SQL statement, regardless of the ONEPASS or TWOPASS option for the precompiler, or a parameter marker was expected in an EXECUTE IMMEDIATE statement. This message is issued only at reference time.

**Severity:** 8 (error)

**System Action:** If the containing SQL statement is a declaration, it is discarded. If the containing SQL statement is executable, it is replaced by host language statements that will, if executed, set an error code in the SQLCA.

**User Response:** Check the declaration and the attributes of the named host variable. If you intended the name to refer to a column, the colon (:) should not be present. If you intended a literal, you need to enclose the value in string delimiters (apostrophes or quotation marks).

### DSNH313I

**E csectname LINE nnnn COL cc INVALID TYPE OR LENGTH OF HOST VARIABLE *name* **

**Explanation:** The host variable name is used in an SQL statement, but either the type or the length is improper for this use.

**Severity:** 8 (error)

**System Action:** The corresponding SQL statement is replaced by host language statements that will, if executed, set an error code in the SQLCA.

**User Response:** Check the declaration and the attributes of the named host variable. Refer to Section 3 of DB2 Application Programming and SQL Guide for the allowable host variable type and length.

### DSNH314I

**E csectname LINE nnnn COL cc REFERENCE TO HOST VARIABLE name IS AMBIGUOUS**

**Explanation:** The host variable name was defined more than once in this application program. The precompiler cannot distinguish which host variable definition should be used here. The following table indicates some possible combinations.

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>hostvar</td>
<td></td>
</tr>
</tbody>
</table>
### DSNH350I W csectname LINE nnnn COL cc ASSIGNMENT TO AN SQLSTATE OR SQLCODE VARIABLE IN AN SQL PROCEDURE MAY BE OVER-WRITTEN AND DOES NOT ACTIVATE ANY HANDLER

**Explanation:** The SQL procedure includes at least one statement that assigns a value to the SQLSTATE or SQLCODE special variables. Since DB2 assigns values to those variables to indicate the results of SQL statement execution, DB2 overwrites the values assigned by the SQL assignment statement.

**Severity:** 8 (error)

**System Action:** Processing continues.

**User Response:** To prevent this warning, do not assign values to the SQLCODE or SQLSTATE special variables.

---

### DSNH401I W csectname LINE nnnn COL cc STATEMENT SPECIFIES INCOMPATIBLE OPERANDS FOR COMPARISON OPERATOR name

**Explanation:** The comparison operation name is used with incompatible data type operands.

**Severity:** 4 (warning)

**System Action:** Processing continues.

**User Response:** Make both operands compatible character data types. Ensure that the table declaration is correct.

---

### DSNH402I W csectname LINE nnnn COL cc STATEMENT APPLIES name TO CHARACTER DATA

**Explanation:** The numeric operation or function name is used with a non-numeric operand.

**Severity:** 4 (warning)

**System Action:** Processing continues.

**User Response:** Make the operand numeric or use a character function. Ensure that the table declaration is correct.

---

### DSNH404I W csectname LINE nnnn COL cc STATEMENT INSERTS OR UPDATES COLUMN name WITH VALUE THAT IS TOO LONG

**Explanation:** An INSERT or UPDATE statement specifies a value that is longer than the maximum length string that can be stored in that column, according to the DECLARE TABLE statement.

**Severity:** 4 (warning)

**System Action:** Processing continues.

**User Response:** Ensure that the length is allowed and that the table declaration is correct.

---

### DSNH405I E csectname LINE nnnn COL cc LITERAL number IS OUT OF RANGE

**Explanation:** The number is not in the proper range:
- +5.4E-79 to 7.2E+75 for floating-point
- −1031 to +1031 for packed decimal
- −2147483648 to 2147483647 for integers

**Severity:** 8 (error)

**System Action:** If the containing SQL statement is a declara-
tion, it is discarded. If the containing SQL statement is executable, it is replaced by host language statements that will, if executed, set an error code in the SQLCA.

User Response: Correct the number.

---

DSNH408I  W  csectname  LINE  nnnn  COL  cc  STATEMENT
 INSERTS OR UPDATES COLUMN  name  WITH
 INCOMPATIBLE DATA TYPE

Explanation: The data type of the value to be inserted into column name by an INSERT or UPDATE statement is incompatible with the declared data type of the column. Both must be numeric or both must be character.

Severity:  4 (warning)

System Action: Processing continues.

Programmer Response: Be sure that the table definitions are current, and that host variables and literals have the proper data types and are matched.

---

DSNH414I  E  csectname  LINE  nnnn  COL  cc  THE NUMERIC
 OR DATETIME COLUMN  column-name  IS
 SPECIFIED IN A LIKE PREDICATE

Explanation: Column column-name with a numeric data type was specified in a LIKE predicate. Columns specified in a LIKE predicate must be character or graphic string columns.

Severity:  8 (error)

System Action: If the containing SQL statement is a declaration, it is discarded. If the containing SQL statement is executable, it is replaced by host language statements that will, if executed, set an error code in the SQLCA.

User Response: Correct the statement.

---

DSNH434I  OPTION  keyword  IS  A  DEPRECATED
 FEATURE

Explanation: keyword is a deprecated feature that will not be supported in releases following DB2 Version 6. It is accepted, but we recommend that you discontinue the use of this keyword.

For indexes, we recommend that you use type 2 indexes rather than type 1 indexes.

Severity:  4 (warning)

System Action: Processing continues normally.

User Response: No change is required for the current release. However, we recommend that you change your SQL statement to remove this feature to prepare for future releases when this feature is not supported.

---

DSNH449I  W  csectname  LINE  nnnn  COL  cc  CREATE
 FUNCTION OR PROCEDURE FOR  routine-name
 CONTAINS AN INVALID FORMAT OF THE
 EXTERNAL NAME CLAUSE OR IS MISSING
 THE EXTERNAL NAME CLAUSE

Explanation: An error was found in the EXTERNAL NAME clause of the CREATE FUNCTION or CREATE PROCEDURE statement for name, or the clause is needed but was not specified.

# If LANGUAGE is not COMPJAVA, the external name must follow these conventions:

# • The external name must be a short identifier with letters or digits. The first character must be a letter. (This is the MVS naming convention for load modules). A possible cause for this error is the inclusion of a blank in the name.
# • If the external name is omitted, the external name defaults to function-name. However, if the function or procedure name is longer than eight characters then the EXTERNAL NAME clause must be explicitly specified to specify a valid short identifier as the external name.
# • If LANGUAGE is COMPJAVA, the length of the EXTERNAL NAME parameter value must be less than or equal to 254 bytes.

Severity:  8 (error)

System Action: The corresponding SQL statement is replaced by host language statements that will, if executed, set an error code in the SQLCA.

User Response: Correct the syntax of the SQL statement. Refer to the DB2 SQL Reference for information on the EXTERNAL NAME clause.

---

DSNH457I  E  csectname  LINE  nnnn  COL  cc  A FUNCTION
 OR DISTINCT TYPE CANNOT BE CALLED
 name  SINCE IT IS RESERVED FOR SYSTEM
 USE.

Explanation: The user-defined function or distinct type cannot be created or referenced because the name selected is reserved for use by the system.

A number of names used as keywords are reserved for system use. These names may not be used as user-defined functions or distinct-type-names, even if they are delimited identifiers. These names are:

# • = <> ¬= ¬> ¬>
# • ALL AND ANY BETWEEN DISTINCT
# • EXCEPT EXISTS FALSE FOR FROM
# • IN IS LIKE MATCH NOT
# • NULL ONLY OR OVERLAPS SIMILAR
# • SOME TABLE TRUE TYPE UNIQUE
# • UNKNOWN

Severity:  8 (error)

System Action: The statement cannot be executed.

User Response: Select a name for the function or distinct type that is not reserved for system use.

---

DSNH473I  E  csectname  LINE  nnnn  COL  cc  A USER
 DEFINED DATA TYPE CANNOT BE CALLED
 THE SAME NAME AS A SYSTEM PREDEFINED
 TYPE (BUILT-IN TYPE).

Explanation: The name of a data type to be created has an unqualified name that is the same as a system-predefined data type or is BOOLEAN. This is not allowed. Adding delimiters does not make the name valid. The following names are restricted:

BIGINT  BINARY  BLOB  BOOLEAN  CHAR
CHARACTER  CLOB  DATALINK  DATE  DCBLOB
DEC  DECIMAL  DOUBLE  FLOAT  GRAPHIC
INT  INTEGER  NUMERIC  REAL  REF
ROWID  SMALLINT  TIME  TIMESTAMP  VARGRAPHIC

Severity:  8 (error)

System Action: The statement cannot be executed.
User Response:  Correct the statement to use another identifier for the name of the new user-defined type.

DSNH491I  E  csectname LINE nnnn COL cc, CREATE STATEMENT FOR USER-DEFINED FUNCTION function-name MUST HAVE A RETURNS CLAUSE, AND EITHER THE EXTERNAL CLAUSE (WITH OTHER REQUIRED KEYWORDS) OR THE SOURCE CLAUSE.

Explanation:  A required clause is missing in the CREATE for function function-name. If EXTERNAL was specified, the following must also be specified:

- LANGUAGE
- PARAMETER STYLE

Severity:  8 (error)

System Action:  The statement cannot be executed.

User Response:  Correct and reissue the failing statement.

DSNH504I  E  csectname LINE nnnn COL cc, CREATE CURSOR name WAS NOT DECLARED

Explanation:  Identifier name is used as a cursor, but was not declared. The declaration might have been discarded because of errors.

Severity:  8 (error)

System Action:  If the containing SQL statement is a declaration, it is discarded. If the containing SQL statement is executable, it is replaced by host language statements that will, if executed, set an error code in the SQLCA.

User Response:  Correct or add the required cursor declaration.

DSNH506I  E  csectname LINE nnnn COL cc, DECLARE CURSOR FOR STATEMENT NAME MUST PRECEDE THE PREPARE STATEMENT FOR THAT STATEMENT NAME

Explanation:  This DECLARE name CURSOR statement is preceded by a PREPARE name statement. In DB2, declarations must precede action statements. This is not the same as in SQL/DS.

Severity:  8 (error)

System Action:  The declaration is noted as being in error and discarded.

User Response:  Move the DECLARE or PREPARE statement so that they are in the proper order, or specify the TWOPASS option if the host language is PLI, ASM, or C. The TWOPASS option has the precompiler check for declarations on the first pass and avoids this problem.

DSNH520I  E  csectname THE OPEN STATEMENT FOR CURSOR cursor-name IS INVALID BECAUSE THE CURSOR WAS DEFINED BY AN ALLOCATE CURSOR STATEMENT

Explanation:  The cursor was not successfully declared, so it was assumed to be defined by an ALLOCATE CURSOR statement. A cursor defined by an ALLOCATE CURSOR statement is open after successful completion of the statement.

Attempting to OPEN an allocated cursor is an error.

Severity:  8 (error)

System Action:  The statement cannot be executed.

User Response:  Refer to Chapter 6 of DB2 SQL Reference for valid keywords for the GRANT or REVOKE statement.
DSNH580I  E csectname LINE nnnn COL cc THE RESULT-EXPRESSIONS OF A CASE EXPRESSION CANNOT ALL BE NULL
Explanation: There is a CASE expression in the statement that has all the result-expressions (expressions following the THEN and ELSE keywords) coded with the keyword NULL.
Severity: 8 (error)
System Action: The statement was not processed.
Programmer Response: Change the CASE expression to include at least one result-expression with a keyword other than NULL.

DSNH5811  E csectname LINE nnnn COL cc DATA TYPES OF THE RESULT-EXPRESSIONS OF A CASE EXPRESSION ARE NOT COMPATIBLE
Explanation: A CASE expression in the statement has at least one result-expression (expressions following the THEN and ELSE keywords) whose data type does not match that of one of the other result-expressions.
Severity: 8 (error)
System Action: The statement was not processed.
Programmer Response: Change the CASE expression so that the data types of all of the result-expressions are compatible.

DSNH582I  E csectname LINE nnnn COL cc THE SEARCH-CONDITION IN A SEARCHED-WHEN-CLAUSE CANNOT BE A QUANTIFIED PREDICATE, IN PREDICATE, OR AN EXISTS PREDICATE
Explanation: The search-condition in a searched-when-clause specifies a quantified predicate, an IN predicate or an EXISTS predicate, but is not allowed.
Severity: 8 (error)
System Action: The statement was not processed.
Programmer Response: Correct the search-condition.

DSNH585I  W csectname LINE nnnn COL cc DUPLICATE schema name SCHEMA NAME
Explanation: The identified schema name was specified twice in the statement.
Severity: 4 (error)
System Action: The duplicated schema name is ignored.
User Response: Remove/correct the duplicate specification.

DSNH586I  E csectname LINE nnnn COL cc THE TOTAL LENGTH OF THE CURRENT PATH SPECIAL REGISTER CANNOT EXCEED 254 CHARACTERS.
Explanation: The CURRENT PATH special register is defined as a VARCHAR(254). The content of the string includes each schema name delimited with double quotes and separated from the next schema name by a comma. The total length of the string of all schema names in the CURRENT PATH cannot exceed 254 characters. A SET CURRENT PATH statement causing this message would exceed this limit.
Severity: 8 (error)
System Action: The statement cannot be executed.
User Response: Remove schema names to reduce the total length to fit the 254 character maximum length. If all the schema names are required, it may be necessary to consolidate some user-defined functions so that fewer schema names are required for the CURRENT PATH.

DSNH590I  E csectname LINE nnnn COL cc NAME name IS NOT UNIQUE IN ROUTINE routine-name
Explanation: Name name is a parameter, SQL variable, condition name, or label in SQL procedure routine-name. name is not unique.
Severity: 8 (error)
System Action: The statement cannot be processed.
User Response: Change the name to make it unique within the routine.

DSNH599I  W csectname LINE nnnn COL cc COMPARISON FUNCTIONS ARE NOT CREATED FOR A DISTINCT TYPE BASED ON A LONG STRING DATA TYPE.
Explanation: Comparison functions are not created for a distinct type based on a long string data type (BLOB, CLOB, DBCLOB, LONG VARCHAR, LONG VARGRAPHIC) since the corresponding function are not available for these built-in data types.
Severity: 4 (warning)
System Action: Processing continues.
User Response: No action is required.

DSNH612I  E csectname LINE nnnn COL cc column-name IS A DUPLICATE COLUMN NAME
Explanation: The CREATE INDEX, CREATE TABLE, CREATE VIEW or ALTER TABLE statement specifies the same 'column-name' for two (or more) columns of the index, table, view, or the UPDATE OF clause of a trigger definition specifies the same column name more than once. Column names must be unique within an index, a table, a view, or in the UPDATE OF clause of a trigger definition. A column cannot be specified in more than one ALTER TABLE clause except if it is specified in an ALTER COLUMN clause and ADD CHECK CONSTRAINT clause.
Severity: 8 (error)
System Action: The statement cannot be executed.
User Response: Correct the CREATE statement to specify unique names for each of the columns of the index, table, view, or the columns in the UPDATE OF clause of a trigger definition. Correct the ALTER statement to specify unique names for each of the ALTER COLUMN clauses.
This error can also occur on CREATE TABLE when a column list of a PRIMARY KEY, FOREIGN KEY, or UNIQUE clause contains two or more occurrences of the same column name.
DSNH628I E csectname LINE nnnn COL cc MUTUALLY EXCLUSIVE CLAUSES HAVE BEEN SPECIFIED.

Explanation: Mutually exclusive clauses were specified in one or more of the following ways:

- A CREATE TABLESPACE statement contains both the SEGSIZE and NUMPARTS clauses.
- A CREATE TABLESPACE statement contains both the SEGSIZE and LARGE clauses.
- A CREATE TABLESPACE statement contains both the SEGSIZE and MEMBER CLUSTER clauses.
- A CREATE or ALTER TABLESPACE contains both the LOCKPART YES and LOCKSIZE TABLESPACE clauses.
- A 'column-definition' contains both NOT NULL and DEFAULT NULL clauses.
- A 'column-definition' contains both FIELDPROC and DEFAULT clauses.
- A select-statement contains both the update-clause and the FOR FETCH ONLY clause.
- An ALTER TABLE statement contains both a DROP CONSTRAINT clause and either a DROP FOREIGN KEY clause or a DROP CHECK clause.
- A CREATE or ALTER TABLESPACE contains both the LOCKPART YES and LOCKSIZE TABLESPACE clauses.
- A CREATE TRIGGER statement specifies more than one correlation name for OLD, NEW, OLD_TABLE, or NEW_TABLE. Each of these correlation specific can appear no more than once in the CREATE TRIGGER statement.
- A CREATE FUNCTION statement contains both a CAST FROM clause and a SOURCE clause.
- A CREATE FUNCTION statement contains both a SOURCE clause and a RETURNS TABLE clause.
- A CREATE FUNCTION statement contains both a SOURCE clause and a clause used to define an external function (EXTERNAL, LANGUAGE, NO SQL).
- A CREATE or ALTER PROCEDURE statement attempts to use the NO WLM ENVIRONMENT and PROGRAM TYPE SUB options. When NO WLM ENVIRONMENT is used, then PROGRAM TYPE MAIN must also be used.
- A CREATE or ALTER PROCEDURE statement attempts to use both NO WLM ENVIRONMENT and either USER or DEFINER for EXTERNAL SECURITY. When NO WLM ENVIRONMENT is used, then PARAMETER STYLE must be either GENERAL or SIMPLE CALL WITH NULLS.

Severity: 8 (error)
System Action: The statement was not executed.
Programmer Response: Change the options specified in the statement and reissue the statement.

DSNH630E E csectname LINE nnnn COL cc THE WHERE NOT NULL SPECIFICATION IS INVALID FOR TYPE 1 INDEXES

Explanation: Type 1 indexes cannot be created with the WHERE NOT NULL specification.

Severity: 8 (error)
System Action: The statement cannot be executed.
Programmer Response: Either the index must be created as a type 2 index, or the WHERE NOT NULL specification must not be used.

DSNH637I E csectname LINE nnnn COL cc DUPLICATE keyword KEYWORD

Explanation: The identified keyword was specified twice in the statement.

Severity: 8 (error)
System Action: If the containing SQL statement is a declaration, it is discarded. If the containing SQL statement is executable, it is replaced by host language statements that will, if executed, set an error code in the SQLCA.
User Response: Remove the duplicate specification.

DSNH644I E csectname INVALID VALUE SPECIFIED FOR KEYWORD keyword IN stmt-type STATEMENT

Explanation: The value specified for the keyword parameter in the stmt-type SQL statement is not a permitted value.

Severity: 8 (error)
System Action: If the SQL statement containing the problem is a declaration, it is discarded. If the SQL statement containing the problem is executable, it is replaced by host language statements that will, if executed, set an error code in the SQLCA.
User Response: Correct the statement. Refer to Chapter 6 of DB2 SQL Reference for information about the allowable values for the keyword in the stmt-type statement.

DSNH683I E csectname LINE nnnn COL cc. THE SPECIFICATION FOR COLUMN, DISTINCT TYPE, FUNCTION, OR PROCEDURE data-item CONTAINS INCOMPATIBLE CLAUSES

Explanation: There is an error in the data item specification in a statement. Incompatible specifications are present such as "INTEGER and FOR BIT DATA", or "INTEGER AS LOCATOR". The location of the error is given by data-item as follows:

- For a CREATE or ALTER TABLE statement, data-item gives the name of the column containing the error. The error could be an invalid specification of FOR BIT DATA, FOR SBCS DATA, FOR MIXED DATA, or FIELDPROC for column data-item.
- For a CREATE FUNCTION or CREATE PROCEDURE statement, data-item is a token that identifies the area of the problem in the statement. For example, "PARAMETER 3" or "RETURNS" or "CAST FROM".
- For a CREATE DISTINCT TYPE statement, data-item gives the name of the type being defined.
• Otherwise, *data-item* is a token that identifies the area of the problem in a parameter list for a function. For example, "PARAMETER 5".

**Severity:** 8 (error)

**System Action:** The statement cannot be processed.

**User Response:** Correct and reissue the failing statement.

---

**DSNH684I**  
*csectname* LINE *nnnn* COL *cc* LENGTH OF LITERAL LIST BEGINNING *string* IS TOO LONG

**Explanation:** The length of the literal list beginning with *string*, excluding insignificant blanks and delimiting parenthesis, is greater than 255.

**Severity:** 8 (error)

**System Action:** The SQL statement cannot be executed.

**System Programmer Response:** Correct the SQL statement. Refer to Chapter 3 of DB2 SQL Reference for information about writing literal lists.

---

**DSNH700I**  
*csectname* THE FIPS STANDARD IS USED FOR FLAGGING

**Explanation:** This message identifies the standard used for flagging during execution.

**Severity:** 0 (informational)

**System Action:** Processing continues.

---

**DSNH701I**  
*csectname* THE IBM SQL STANDARD IS USED FOR FLAGGING

**Explanation:** This message identifies the standard used for flagging during execution.

**Severity:** 0 (informational)

**System Action:** Processing continues.

---

**DSNH702I**  
*csectname* LINE *nnnn* COL *cc* THE STATEMENT DEVIATES FROM THE SQL STANDARD AT THE TOKEN COMMENCING WITH THE TEXT *text*

**Explanation:** A syntax deviation from the standard named in the earlier message (FIPS or IBM SQL) was found in the SQL statement.

**Severity:** 4

**User Response:** Check and correct the SQL statement.

---

**DSNH703I**  
*csectname* LINE *nnnn* COL *cc* A DATA DEFINITION STATEMENT IS NOT WITHIN A CREATE SCHEMA STATEMENT

**Explanation:** The FIPS standard requires all data definition statements to be contained within a CREATE SCHEMA statement.

**Severity:** 4

**User Response:** Check and correct the SQL statement.

---

**DSNH704I**  
*csectname* LINE *nnnn* COL *cc* THERE IS A NONSTANDARD EMBEDDED COMMENT

**Explanation:** A comment embedded within an SQL statement does not meet the requirements of the standard being flagged: The FIPS standard is being checked and the comment does not begin with at least two consecutive hyphens.

**Severity:** 4

**User Response:** Check and correct the SQL statement.

---

**DSNH705I**  
*csectname* LINE *nnnn* COL *cc* AN SQL SYNTAX DEVIATION OCCURRED. THE STATEMENT IS NOT COMPLETE

**Explanation:** The SQL statement terminated before all required elements were found.

**Severity:** 4

**User Response:** Check and correct the SQL statement.

---

**DSNH706I**  
*csectname* LINE *nnnn* COL *cc* THE IDENTIFIER *token* IS GREATER THAN 18 CHARACTERS

**Explanation:** One of the following conditions was not met:

- The length value should be greater than zero.
- The precision value should be greater than zero.
- The scale value should not be greater than precision.

**Severity:** 4

**User Response:** Check and correct the SQL statement.

---

**DSNH707I**  
*csectname* LINE *nnnn* COL *cc* THE COLUMN *column* HAS AN INVALID LENGTH, PRECISION, OR SCALE ATTRIBUTE

**Explanation:** One of the following conditions was not met:

- The length value should be greater than zero.
- The precision value should be greater than zero.
- The scale value should not be greater than precision.

**Severity:** 4

**User Response:** Check and correct the SQL statement.

---

**DSNH708I**  
*csectname* LINE *nnnn* COL *cc* THE DATA TYPE OF *token* SHOULD BE EXACT NUMERIC WITH A SCALE OF ZERO

**Explanation:** The data type of INDICATOR PARAMETER or INDICATOR VARIABLE should be exact numeric with a scale of zero.

**Severity:** 4

**User Response:** Check and correct the SQL statement.
DSNH709I W csectname  Lnnn  COL  cc. THE SET FUNCTION REFERENCES COLUMN column

Explanation: One of the following conditions was not met:

- A column specification of a DISTINCT set function cannot reference a column derived from a set function specification.
- A column specification of an ALL set function cannot reference a column derived from a set function specification.

Severity: 4
User Response: Note the deviation from the applicable standard. Check and correct the SQL statement.

DSNH710I W csectname  Lnnn  COL  cc. A VALUE EXPRESSION CONTAINING column CANNOT INCLUDE OPERATORS

Explanation: A value expression cannot include operators in an outer reference column specification.

Severity: 4
User Response: Note the deviation from the applicable standard. Check and correct the SQL statement.

DSNH711I W csectname  Lnnn  COL  cc. THE COLUMN SPECIFICATION IS MISSING OR INVALID FOR THE ALL SET FUNCTION function

Explanation: The value expression of an ALL set function specification should include a column specification.

Severity: 4
User Response: Note the deviation from the applicable standard. Check and correct the SQL statement.

DSNH712I W csectname  Lnnn  COL  cc. THE COLUMN column IS NOT UNIQUE AND REQUIRES QUALIFICATION.

Explanation: The identified column is duplicated within the current scope. Qualification must be given to uniquely identify the required column.

Severity: 4
User Response: Note the deviation from the applicable standard. Check and correct the SQL statement.

DSNH713I W csectname  Lnnn  COL  cc. A VALUE EXPRESSION MAY NOT CONTAIN A SET FUNCTION SPECIFICATION

Explanation: The value expression of an ALL set function might not contain a set function specification.

Severity: 4
User Response: Note the deviation from the applicable standard. Check and correct the SQL statement.

DSNH714I W csectname  Lnnn  COL  cc. THE COLUMN column DOES NOT IDENTIFY A COLUMN OF A TABLE WITHIN THE CURRENT SCOPE

Explanation: One of the following conditions was found:

- The table or correlation name used as a qualifier does not exist.
- The column name does not exist within the current scope or the scope of the qualifier.

Severity: 4
User Response: Note the deviation from the applicable standard. Check and correct the SQL statement.

DSNH715I W csectname  Lnnn  COL  cc. A SET FUNCTION THAT CONTAINS THE OUTER REFERENCED COLUMN column IS NOT IN THE SUBQUERY OF A HAVING CLAUSE

Explanation: A set function specification must be contained in a subquery of a HAVING clause if it contains an outer referenced column specification.

Severity: 4
User Response: Note the deviation from the applicable standard. Check and correct the SQL statement.

DSNH716I W csectname  Lnnn  COL  cc. THE RESULT OF A SUM OR AVG FUNCTION CANNOT BE A CHARACTER STRING

Explanation: The character string is not valid for the result of a SUM or AVG set function specification.

Severity: 4
User Response: Note the deviation from the applicable standard. Check and correct the SQL statement.

DSNH717I W csectname  Lnnn  COL  cc. THE OPERATOR operator IS INVALID IN THIS CONTEXT

Explanation: One of the following conditions was not met:

- A value expression containing a distinct set function cannot include dyadic operators.
- The first character following a monadic operator cannot be a plus or minus sign.
- The value expression should not contain operators if primary is a character string.

Severity: 4
User Response: Note the deviation from the applicable standard. Check and correct the SQL statement.

DSNH718I W csectname  Lnnn  COL  cc. THE exptype EXPRESSION IS COMPARING INCOMPATIBLE DATA TYPES

Explanation: The data types of one of the following (identified by exptype) do not match:

<table>
<thead>
<tr>
<th>exptype</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMPARISON</td>
<td>Comparison operators must match.</td>
</tr>
<tr>
<td>BETWEEN</td>
<td>The three value expressions must match.</td>
</tr>
</tbody>
</table>

User Response: Check and correct the SQL statement.
IN Value expression, subquery, and all value specifications must match.
QUANTIFIED Value expression and subquery must match.

Severity: 4
User Response: Note the deviation from the applicable standard. Check and correct the SQL statement.

**DSNH720I**
**csectname** LINE nnnn COL cc. THE ESCAPE CHARACTER MUST BE A ONE-BYTE CHARACTER STRING

Explanation: The escape character in a LIKE predicate must have the data type of character string with a length of 1.
Severity: 4
User Response: Note the deviation from the applicable standard. Check and correct the SQL statement.

**DSNH721I**
**csectname** LINE nnnn COL cc. THE WHERE CLAUSE, GROUP BY CLAUSE, OR HAVING CLAUSE IS INVALID FOR THE GROUPED VIEW table.

Explanation: If the table identified in the FROM clause is a grouped view, then the table expression must not contain a WHERE clause, GROUP BY clause, or HAVING clause.
Severity: 4
User Response: Note the deviation from the applicable standard. Check and correct the SQL statement.

**DSNH722I**
**csectname** LINE nnnn COL cc. name OCCURS MORE THAN ONCE IN A FROM CLAUSE

Explanation: One of the following conditions was found:
- The table name occurs more than once in a FROM clause.
- The correlation name is identical to a table name or to another correlation name in a FROM clause.
Severity: 4
User Response: Note the deviation from the applicable standard. Check and correct the SQL statement.

**DSNH723I**
**csectname** LINE nnnn COL cc. ONLY ONE TABLE REFERENCE IS ALLOWED IN THE FROM CLAUSE FOR A GROUPED VIEW

Explanation: If the table identified by table name is a grouped view, then the FROM clause must contain exactly one table reference.
Severity: 4
User Response: Note the deviation from the applicable standard. Check and correct the SQL statement.

**DSNH724I**
**csectname** LINE nnnn COL cc. A REFERENCE TO THE COLUMN column WHICH IS DERIVED FROM A SET FUNCTION IS INVALID IN A WHERE CLAUSE

Explanation: A value expression directly contained in the search condition of a WHERE clause must not include a reference to a column derived from a set function specification.
Severity: 4
User Response: Note the deviation from the applicable standard. Check and correct the SQL statement.

**DSNH725I**
**csectname** LINE nnnn COL cc. A WHERE CLAUSE MUST BE CONTAINED IN A HAVING CLAUSE WHEN A FUNCTION IS USED

Explanation: If a value expression directly contained in the search condition is a function specification, then the WHERE clause must be contained in a HAVING clause.
Severity: 4
User Response: Note the deviation from the applicable standard. Check and correct the SQL statement.

**DSNH726I**
**csectname** LINE nnnn COL cc. THE COLUMN column IS DUPLICATED WITHIN THE CURRENT SCOPE

Explanation: The specified column is duplicated within the current scope.
Severity: 4
User Response: Note the deviation from the applicable standard. Check and correct the SQL statement.
User Response: Note the deviation from the applicable standard. Check and correct the SQL statement.

Severity: 4

Explanation: The column specification must refer to a grouping column or be specified within a set function specification.

User Response: Note the deviation from the applicable standard. Check and correct the SQL statement.

Severity: 4

Explanation: The degree of the table expression must be 1 if the result specification '*' is specified in a subquery of any predicate other than an EXISTS predicate.

User Response: Note the deviation from the applicable standard. Check and correct the SQL statement.

Severity: 4

Explanation: One of the following conditions was not met:
- If the table expression is a grouped view, the result specification of a subquery cannot contain a set function specification.
- If the table expression is a grouped view, the select list of a query specification cannot contain a function.

User Response: Note the deviation from the applicable standard. Check and correct the SQL statement.

Severity: 4

Explanation: For a grouped table, the column specification must refer to a grouping column or should be specified within a set function specification.

User Response: Note the deviation from the applicable standard. Check and correct the SQL statement.

Severity: 4

Explanation: The authorization identifier prefixed to the table name is invalid.

User Response: Note the deviation from the applicable standard. Check and correct the SQL statement.

Severity: 4

Explanation: The table name or view name specified already exists in the catalog.

User Response: Note the deviation from the applicable standard. Check and correct the SQL statement.

Severity: 4

Explanation: At least one column definition should be specified for a CREATE TABLE.

User Response: Note the deviation from the applicable standard. Check and correct the SQL statement.
The data type of the target is not compatible with the data type of the source.

**Explanation:** Data types should match between source and target in a FETCH and SELECT statement.

**Severity:** 4

**User Response:** Note the deviation from the applicable standard. Check and correct the SQL statement.

The function cannot be created because ALLOW PARALLEL and MODIFIES SQL DATA were both specified explicitly or implicitly. A function cannot be parallelized if it modifies data.

**Explanation:** The function cannot be created because functions cannot modify data when they are processed in parallel.

**Severity:** 8 (error)

**System Action:** The statement cannot be executed.

**User Response:** Specify DISALLOW PARALLEL or change the MODIFIES SQL DATA to NO SQL, CONTAINS SQL or READS SQL DATA.

The data set name specified on the CLIST keyword parameter contains unbalanced parenthesis.

**Explanation:** The specified CLIST keyword parameter does not have an acceptable value.

**Severity:** 8 (error)

**System Action:** The CLIST processing is terminated.

**User Response:** Refer to the DSNH (TSO clist) section in DB2 Command Reference for a complete list of the supported CLIST parameters and their associated values. Correct the invalid parameter, and resubmit the job.

The DSNH CLIST requires a value for the input data set name (INPUT). You cannot use an input data set name of NONE.

**Explanation:** An inconsistent processing set was specified. An earlier phase and a later phase were requested, but not the intermediate step needed to process data between them. For example, requesting the precompile and the link edit without the compile produces this error. Values for process1 are PRECOMP, CICSSLAT, COMPILE, LINK, or BIND. Values for process2 are COMPIL, LINK, or RUN.

This message is issued by the following CLIST: DSNH

**Severity:** 4 (warning)

**System Action:** process2 is not performed, but other processing is done.

**User Response:** Specify a consistent combination of processing. Application program preparation needs to run all the steps to provide a correct application program. The process does allow beginning or ending steps to be run at a different time. See message DSNH740I for the required step order.

The specified CLIST keyword parameter does not have an acceptable value.

**Explanation:** The specified CLIST keyword parameter does not have an acceptable value.

**Severity:** 8 (error)

**System Action:** The CLIST is terminated.

**User Response:** If a member name is to be associated with the specified data set, the member name must be enclosed in parentheses.

The data set name specified on the CLIST keyword parameter contains unbalanced parenthesis.

This message is issued by the following CLIST: DSNH

**Severity:** 8 (error)

**System Action:** The CLIST is terminated.

**User Response:** Refer to the DSNH (TSO clist) section in DB2 Command Reference for a complete list of the supported CLIST parameters and their associated values. Correct the invalid parameter, and resubmit the job.

This message is issued by the following CLIST: DSNH

**Severity:** 0 (successful)

**System Action:** Processing continues as requested.

**User Response:** This phase is complete. If there are errors, other messages are produced. The next phase requested begins. The order of the phases is:

1. PLI Macro Pass
2. Precompiler
3. CICS Command Translator
4. Bind Package
5. Bind Plan
6. ASM, ASMH, C (C/370 Compiler), COBOL, COBOL2, FORTRAN, PLI
7. Prelink
**DSNH753I**  ENTER INPUT DATA SET NAME

**Explanation:** The CLIST is requesting the name of the input data set.

This message is issued by the following CLIST: DSNH

**Severity:** 0 (successful)

**System Action:** The system waits for user to enter data set name or for the CLIST to be terminated.

**User Response:** Enter the name of the data set. Do not specify the parameter or command, but just enter the name of the data set. The standard TSO prefixing will be done if the data set name is not entered within apostrophes.

**Severity:** 8 (error)

**System Action:** The CLIST terminates.

**User Response:** Correct the input request. Specify a different name or for the CLIST to be terminated.

**System Action:** The CLIST is terminated.

**User Response:** Correct the input request. The default for this parameter is TEMP, which should be adequate for most usage.

**Severity:** 8 (error)

**System Action:** The CLIST terminates.

**User Response:** Specify a plan name with 8 or fewer characters.

**Severity:** 8 (error)

**System Action:** The CLIST terminates.

**User Response:** Use the specified language in the TSO or batch environment.

**Severity:** retcode

**System Action:** The CLIST terminates.

**User Response:** Determine the cause for the high return code. If the parameters include TERM(NONE) and direct the PRINT to a data set, you might need to search the print data sets for the listing of the error. Refer to message DSNH756I for an explanation of the print data set names assigned during processing.

**Problem Determination:** The location of the messages describing the prior errors depends upon the values of the TERM and PRINT parameters. The messages can be directed to the terminal, to preallocated data sets, or to data sets dynamically allocated during CLIST processing.

If TERM(NONE) PRINT(NONE) was specified, the messages are not available. Execute the CLIST again and specify a location for the error messages.

---

**DSNH754I**  cList OUTNAME parameter name MUST NOT CONTAIN SPECIAL CHARACTERS

**Explanation:** The DSNH and DSNHC CLISTs, cList, use the OUTNAME parameter to build names for a number of data sets that are passed from phase to phase. These names are prefixed by an authorization ID or TSO prefix value and have a number of suffixes. For this reason, OUTNAME parameter name must not contain special characters. It can contain a period or national characters. It cannot have apostrophes to specify a single data set name.

**Severity:** 8 (error)

**System Action:** The CLIST is terminated.

**User Response:** Correct the input request. Specify a different OUTNAME parameter.

**Severity:** 8 (error)

**System Action:** The CLIST is terminated.

**User Response:** Use the specified language in the TSO or batch environment.

**Severity:** retcode

**System Action:** The CLIST terminates.

**User Response:** Execute the CLIST again and specify a location for the error messages.

---

**DSNH755I**  OUTNAME parameter name MUST NOT BEGIN THE SAME AS INPUT

**Explanation:** The DSNH CLIST uses the OUTNAME parameter name to build a number of data sets that are passed from phase to phase. These data sets could conflict with the INPUT data set (input) if the names are the same, causing the INPUT data set to be overwritten. To avoid this problem, the names are not allowed to have the same initial characters.

This message is issued by the following CLIST: DSNH

**Severity:** 8 (error)

**System Action:** The CLIST is terminated.

**User Response:** Correct the input request. Specify a different OUTNAME. The default for OUTNAME is TEMP.

**Severity:** retcode

**System Action:** The CLIST terminates.

**User Response:** Determine the cause for the high return code. If the parameters include TERM(NONE) and direct the PRINT to a data set, you might need to search the print data sets for the listing of the error.

**Problem Determination:** The location of the messages describing the prior errors depends upon the values of the TERM and PRINT parameters. The messages can be directed to the terminal, to preallocated data sets, or to data sets dynamically allocated during CLIST processing.

If TERM(NONE) PRINT(NONE) was specified, the messages are not available. Execute the CLIST again and specify a location for the error messages.

---

**DSNH756I**  cList PRINT parameter name MUST NOT CONTAIN SPECIAL CHARACTERS

**Explanation:** The DSNH and DSNHC CLISTs (cList) use the PRINT parameter to build names for data sets used for the print listings from various phases. These names are prefixed by an authorization ID or a TSO prefix value and have a number of suffixes. The PRINT parameter name can contain a period or national characters, but it cannot contain special characters. It cannot have apostrophes to specify a single data set name.

The data set names built using the PRINT(print) qualifier are the following:

<table>
<thead>
<tr>
<th>PRINT Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRINT.CXLIST</td>
<td>CICS Command Translator</td>
</tr>
<tr>
<td>PRINT.LINKLIST</td>
<td>Linkage Editor</td>
</tr>
<tr>
<td>PRINT.LIST</td>
<td>Compiler or Assembler</td>
</tr>
</tbody>
</table>

**Severity:** retcode

**System Action:** The CLIST terminates.

**User Response:** Execute the CLIST after specifying a different PRINT parameter.
To find the documentation, note the immediately preceding DSNH740I message for the location of the listings. If the 'LISTING IN data-set' portion of the message is missing, specify a PRINT data set, SOURCE(YES) and XREF(YES), and execute the CLIST again. Use TERM(TERM) to direct error messages to your terminal. These listings and execution of the DSNH CLIST are required for problem diagnosis.

If the error is in the CLIST or the error location is CLIST CHECKING, use CONTROL(SYMLIST) to produce a detailed trace of the CLIST execution and provide the trace listing.

Check for DSNH751I messages that describe the error.

**DSNH760I**  **PRELINK OPTION INVALID WITH HOST LANGUAGE**  *(host-language)*

**Explanation:** Invocation of the PRELINK step is not supported by *host-language*. This option is only valid for the following DSNH HOST language compilers: C, CPP, and IBMCOB.

This message is issued by the following CLIST: DSNH

**Severity:** 4 (error)

**System Action:** The DSNH PRELINK parameter is ignored and prelink utility processing is bypassed. Clist processing continues normally with a return code of 4.

**User Response:** Refer to the description of the DSNH PRELINK keyword option in DB2 Command Reference.

---

**DSNH770I**  **W csectname LINE nnnn COL cc. YOU MUST DECLARE COLUMN column AS NOT NULL**

**Explanation:** All columns identified as UNIQUE must be defined with the NOT NULL option.

**Severity:** 4

**User Response:** Note the deviation from the applicable standard. Check and correct the SQL statement.

---

**DSNH771I**  **W csectname LINE nnnn COL cc. THE VIEWED TABLE table MUST BE UPDATEABLE**

**Explanation:** When the WITH CHECK OPTION is specified, then the viewed table must be updateable.

**Severity:** 4

**User Response:** Note the deviation from the applicable standard. Check and correct the SQL statement.

---

**DSNH772I**  **W csectname LINE nnnn COL cc. INVALID NUMBER OF COLUMN NAMES**

**Explanation:** The number of column names in the view column list should be the same as the degree of the table specified by the query specification.

**Severity:** 4

**User Response:** Note the deviation from the applicable standard. Check and correct the SQL statement.

---

---

---

---

---
**DSNH778I**  
 csectname LINE nnnn COL cc. THE TABLE table IS A READ-ONLY TABLE  

Explanation: A DELETE, an INSERT, or an UPDATE statement was specified on a read-only table.  

Severity: 4  

User Response: Note the deviation from the applicable standard. Check and correct the SQL statement.  

---  

**DSNH783I**  
 csectname LINE nnnn COL cc. THE NUMBER OF COLUMNS SPECIFIED DOES NOT MATCH THE NUMBER OF VALUES SPECIFIED  

Explanation: In an INSERT statement, the number of columns specified does not match the number of values specified.  

Severity: 4  

User Response: Note the deviation from the applicable standard. Check and correct the SQL statement.  

---  

**DSNH784I**  
 csectname LINE nnnn COL cc. THE NUMBER OF COLUMNS SPECIFIED DOES NOT MATCH THE DEGREE OF TABLE table IN THE QUERY SPECIFICATION  

Explanation: The number of columns specified in an INSERT statement does not match the degree of the table specified in the query specification.  

Severity: 4  

User Response: Note the deviation from the applicable standard. Check and correct the SQL statement.  

---  

**DSNH780I**  
 csectname LINE nnnn COL cc. THE TABLE table1 IS NOT THE FIRST TABLE table2 SPECIFIED IN THE DECLARE CURSOR STATEMENT  

Explanation: The table specified in a DELETE or an UPDATE statement cannot be used in a FROM clause of any subquery contained in its search condition.  

Severity: 4  

User Response: Note the deviation from the applicable standard. Check and correct the SQL statement.  

---  

**DSNH781I**  
 csectname LINE nnnn COL cc. THE TABLE table IS A READ-ONLY TABLE  

Explanation: A DELETE, an INSERT, or an UPDATE statement was specified on a read-only table.  

Severity: 4  

User Response: Note the deviation from the applicable standard. Check and correct the SQL statement.  

---  

**DSNH785I**  
 csectname LINE nnnn COL cc. THE NUMBER OF TARGET SPECIFICATIONS DO NOT MATCH THE DEGREE OF TABLE table  

Explanation: The number of target specifications in the FETCH statement do not match the degree of the table specified.  

Severity: 4  

User Response: Note the deviation from the applicable standard. Check and correct the SQL statement.  

---  

**DSNH782I**  
 csectname LINE nnnn COL cc. THE TARGET TABLE table OF THE INSERT STATEMENT IS ALSO IN THE FROM CLAUSE OR IN A CONTAINED SUBQUERY  

Explanation: The named table must not be identified in a FROM clause of a query specification or of any subquery contained in the query specification.  

Severity: 4  

User Response: Note the deviation from the applicable standard. Check and correct the SQL statement.  

---  

**DSNH786I**  
 csectname LINE nnnn COL cc. YOU CANNOT USE A GROUP BY OR HAVING CLAUSE OR IDENTIFY A GROUPED VIEW IN THIS CONTEXT  

Explanation: The table identified in the FROM clause of the table expression in a SELECT statement should not include a GROUP BY or HAVING clause and should not identify a grouped view.  

Severity: 4  

User Response: Note the deviation from the applicable standard. Check and correct the SQL statement.
### DSNH787I

**W csectname LINE nnnn COL cc, THE NUMBER OF ELEMENTS SPECIFIED IN THE SELECT LIST SHOULD MATCH THE NUMBER IN THE TARGET LIST**

**Explanation:** In the SELECT statement, the number of elements specified in the select list should match the number of elements in the target list.

**Severity:** 4

**User Response:** Note the deviation from the applicable standard. Check and correct the SQL statement.

### DSNH788I

**W csectname LINE nnnn COL cc, THE SET FUNCTION function IS NOT ALLOWED IN AN UPDATE STATEMENT**

**Explanation:** A value expression in a SET clause of an UPDATE statement should not include a set function specification.

**Severity:** 4

**User Response:** Note the deviation from the applicable standard. Check and correct the SQL statement.

### DSNH789I

**W csectname LINE nnnn COL cc, YOU CANNOT SPECIFY NULL FOR NOT NULL COLUMN column**

**Explanation:** If NULL is specified in the SET clause of the UPDATE statement, then the corresponding column should allow nulls.

**Severity:** 4

**User Response:** Note the deviation from the applicable standard. Check and correct the SQL statement.

### DSNH790I

**W csectname LINE nnnn COL cc, THERE IS AN INVALID SQL TERMINATOR FOR THE HOST LANGUAGE**

**Explanation:** The SQL statement was not terminated by the correct construct for the host language being processed.

**Severity:** 4

**User Response:** Note the deviation from the applicable standard. Check and correct the SQL statement.

### DSNH791I

**W csectname LINE nnnn COL cc, YOU MUST DEFINE THE HOST VARIABLE identifier**

**Explanation:** The host variable named was either not defined within the program or defined outside the SQL declaration section.

**Severity:** 4

**User Response:** Note the deviation from the applicable standard. Check and correct the SQL statement.

### DSNH792I

**W csectname LINE nnnn COL cc, THE TABLE table WAS NOT FOUND IN THE CATALOG**

**Explanation:** The named table does not exist in the catalog.

**Severity:** 4

**User Response:** Note the deviation from the applicable standard. Check and correct the SQL statement.

### DSNH793I

**W csectname LINE nnnn COL cc, THERE IS AN INVALID IDENTIFIER FORMAT identifier FOR HOST LANGUAGE language**

**Explanation:** The format of the identifier name displayed does not meet the requirements of the host language.

**Severity:** 4

**User Response:** Note the deviation from the applicable standard. Check and correct the SQL statement.

### DSNH794I

**W csectname LINE nnnn COL cc, THE OBJECT object-name CANNOT BE CREATED BECAUSE THE FIRST THREE CHARACTERS ARE RESERVED FOR SYSTEM OBJECTS**

**Explanation:** In general, SYS is a reserved prefix for names. The only exceptions are:

- SYSPROC is a valid schema name for stored procedures.
- SYSAADM is a valid schema name.

This condition is similar to the condition reported in SQLCODE -707.

**Severity:** 4

**User Response:** Select a name that does not start with a reserved prefix.

### DSNH795I

**E csectname LINE nnnn COL cc, INVALID SPECIFICATION OF A ROWID COLUMN**

**Explanation:** For a CREATE TABLE statement, the specification of a ROWID column may be invalid for one of the following reasons:

- A ROWID column cannot be a column of a temporary table.
- A ROWID column cannot be a column of a table with an EDITPROC.
- A ROWID column cannot be a column of a foreign key.
- A ROWID column cannot be a column of a primary key.
- A ROWID column cannot be referenced in the check-condition of a table check constraint.

**Severity:** 8

**System Action:** The statement was not executed.

**User Response:** Correct the syntax.

### DSNH867I

**E csectname LINE nnnn COL cc, INVALID SPECIFICATION OF A ROWID COLUMN**

**Explanation:** For a CREATE TABLE statement, the specification of a ROWID column might be invalid for one of the following reasons:

- A ROWID column cannot be a column of a temporary table.
- A ROWID column cannot be a column of a table with an EDITPROC.
- A ROWID column cannot be a column of a foreign key.
- A ROWID column cannot be a column of a primary key.
- A ROWID column cannot be referenced in the check-condition of a table check constraint.

**Severity:** 8

**System Action:** The statement was not executed.
# User Response: Correct the syntax.

**DSNH870I** W csectname THERE IS NOT ENOUGH MEMORY FOR THE FLAGGER; FLAGGING IS DISCONTINUED

**Explanation:** The flagger could not allocate enough storage to load all required modules.

**Severity:** 4

**System Action:** Precompiling continues but flagger operation is discontinued.

**User Response:** Increase the region size in the JCL for the application. Allocate more storage for flagger operation.

**DSNH871I** W csectname AN ERROR OCCURRED WHEN ATTEMPTING TO LOAD THE FLAGGER MODULE module. FLAGGING IS DISCONTINUED

**Explanation:** A flagger module was not found during flagger initialization.

**Severity:** 4

**System Action:** Precompiling continues but flagger operation is discontinued.

**User Response:** Refer to the message produced by the operating system for details of causes and proceed as instructed for that message.

**DSNH872I** W csectname AN ERROR OCCURRED WHEN INITIALIZING THE FLAGGER. FLAGGING IS DISCONTINUED

**Explanation:** An internal error occurred during flagger initialization.

**Severity:** 4

**System Action:** Precompiling continues but flagger operation is discontinued.

**User Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**DSNH873I** W csectname THE FLAGGER COULD NOT PROCESS THE SQL STATEMENT. FLAGGING IS DISCONTINUED

**Explanation:** An SQL statement passed to the flagger caused an internal error within the flagger.

**Severity:** 4

**System Action:** Precompiling continues but flagger operation is discontinued.

**User Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**DSNH874I** W csectname AN ERROR OCCURRED WHEN TERMINATING THE FLAGGER

**Explanation:** An internal error occurred during flagger termination.

**Severity:** 4

**System Action:** Precompiling continues but flagger operation is discontinued.

**User Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**DSNH875I** W csectname AN ERROR OCCURRED WHEN ATTACHING TO DB2, REASON CODE: X'reason'; FLAGGING CONTINUES AS SYNTAX ONLY

**Explanation:** An error occurred while trying to connect or disconnect from the DB2 subsystem.

**Severity:** 4

**System Action:** Processing continues without semantics flagging.

**User Response:** Refer to the reason code returned in this message and perform corrective actions.

**DSNH876I** W csectname AN ERROR SQLCODE sqlcode WAS RETURNED DURING FLAGGER ACCESS TO THE CATALOG OBJECT authid.table. MODULE NAME: module ERROR REASON CODE: X'reason'; FLAGGING CONTINUES WITH SYNTAX CHECK ONLY

**Explanation:** An error occurred during the execution of a flagger access to the DB2 catalog.

**Severity:** 4

**System Action:** Processing continues without semantics flagging.

**User Response:** Use the provided SQL return code, object type, and name to identify the problem. If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**DSNH877I** W csectname NOT ENOUGH MEMORY FOR FLAGGER OPERATION: RETURN CODE: return

**Explanation:** Insufficient storage is available for flagger operation.

**Severity:** 4

**System Action:** Processing continues without flagging.

**User Response:** Check whether the storage allocation for the precompiler can be increased. Allocate more storage for flagger operation.
DSNH878I W csectname ERROR RELEASING FLAGGER MEMORY; FLAGGING IS DISCONTINUED

Explanation: An error occurred when a flagger module attempted to release storage back to the flagger pool.

Severity: 4

System Action: Processing continues without flagging.

User Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

```
DSNH879I W csectname ERROR RELEASING FLAGGER MEMORY; RETURN CODE return
```

Explanation: An error occurred when a flagger module attempted to release storage back to the operating system.

Severity: 4

System Action: Processing continues without flagging.

User Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

```
DSNH880I W csectname AN ERROR WAS RETURNED DURING FLAGGER ACCESS TO THE DB2 CATALOG; REASON CODE: X'reason' RETURN CODE X'return'
```

Explanation: An error occurred when a flagger module attempted to access the system catalog.

Severity: 4

System Action: Processing continues without flagging.

User Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

```
DSNH901I S csectname U LINE nnnn COL cc INTERNAL PRECOMPILER ERROR – REASON CODE ccc
```

Explanation: An internal compiler consistency check failed.

Reason codes are:

- 000 The message formatter was called with an unlisted internal message number.
- 001 The parser received a token code of 0 from the lexical scan. Lexical scan refers to a scan of words rather than syntax.
- 002 Error in storage suballocation control blocks.
  - The error might have occurred because a DB2 SQL statement limitation was exceeded. The SQL statement might be referencing, creating, or declaring more columns than the DB2 defined maximum number allowed for an SQL statement. Another possibility is that too many host variables are being referenced in the SQL statement.
- 003 Error in a storage suballocation request.
  - This error might have occurred because of storage constraints when building the DBRM entry for the SQL statement or because the SQL statement exceeds the DB2 maximum statement length.
- 004 Error in pointer structures.
- 005 On BIND or REBIND, a host variable was not found.
- 006 Unexpected value for parser option.
- 007 The internal limit was exceeded.
  - A fully qualified name exceeds the maximum length of 255 characters.
  - The size of a DBRM record exceeds 65536 bytes of storage.
- 008 Internal conversion error.
  - An error occurred when converting a timestamp version-id.

Severity: 16 (unrecoverable error)

System Action: The precompiler is terminated immediately.

User Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: A copy of the application program source and the printout is useful (specify SOURCE and XREF).

```
DSNH904I csectname U STORAGE OVERFLOW
```

Explanation: More storage is needed, but could not be obtained during precompiler/parser execution.

Severity: 16 (unrecoverable error)

System Action: The precompiler/parser is terminated immediately.

System Programmer Response: The storage required for the current statement could not be acquired or exceeds the maximum for a single request. If the region size is being used completely, check whether the region can be expanded. If it cannot be expanded, the SQL statement is too large to be processed.

```
DSNH1760I E csectname LINE nnnn COL cc CREATE STATEMENT FOR STORED PROCEDURE procedure-name MUST HAVE A VALID LANGUAGE CLAUSE AND EXTERNAL CLAUSE.
```

Explanation: The CREATE statement for procedure procedure-name must have both a valid LANGUAGE clause and a valid EXTERNAL clause.

Severity: 8 (error)

System Action: The statement cannot be executed.

User Response: Correct and reissue the failing statement.

```
DSNH4001I HOST LANGUAGE STATEMENT EXCEEDS MAXIMUM OF 1000 LINES
```

Explanation: A user put more than 1000 lines in a single PL/I DCL statement.

Severity: 8

System Action: Processing continues.

User Response: Split the DCL statement into two parts.
# DSNH4408I E csectname LINE nnnn COL cc THE VALUE IS
# NOT COMPATIBLE WITH THE DATA TYPE OF
# ITS TARGET
# Explanation: The data type of the value to be assigned to
# the parameter or SQL variable is incompatible with the
# declared data type of the assignment target. Both must be:
# • Numerals
# • Characters
# • Graphics
# • Dates or character
# • Times or character
# • Timestamps or character
# • Row ID’s
# • The same distinct types
# Severity: 8 (error)
# System Action: The statement cannot be processed.
# User Response: Examine the current definition for the
# parameter or SQL variable and ensure that it has the proper
data type.

# DSNH4779I E csectname LINE nnnn COL cc LABEL label
# SPECIFIED ON A GOTO OR LEAVE STATE-
# MENT IS NOT VALID
# Explanation: In an SQL procedure, label is specified on a
# GOTO or LEAVE statement. label is not defined or is not a
# valid label for the statement.
# The label on a LEAVE statement must be the label for a
# LOOP, REPEAT, WHILE, or compound statement.
# The label in a GOTO statement must be defined within a
# scope that the GOTO statement can reach.
# • If the GOTO statement is defined in a compound state-
# ment, label must be defined inside the same compound
# statement.
# • If the GOTO statement is defined in a handler, label must
# be defined in the same handler and must follow the other
# scope rules.
# • If the GOTO statement is defined outside a handler, label
# must not be defined within a handler.
# Severity: 8 (error)
# System Action: The statement cannot be processed.
# User Response: Change the label in the LEAVE statement to
# match the label on the LOOP, REPEAT, WHILE, or COM-
# Pound statement that contains the LEAVE statement.
# Ensure that the label in the GOTO statement is defined within
# a scope that the GOTO statement can reach.

# DSNH4785I E csectname LINE nnnn COL cc THE DECLARA-
# TION OR USE OF THE SQLSTATE OR
# SQLCODE VARIABLE IS NOT VALID
# Explanation: The declaration or use of an SQLCODE or
# SQLSTATE special variable is not valid for one of the following
# reasons:
# • SQLSTATE is declared with a data type other than
# CHAR(5).
# • SQLCODE is declared with a data type other than
# INTEGER.
# • NULL is assigned to SQLCODE or SQLSTATE.
# Severity: 8 (error)
# System Action: The statement cannot be processed.
# User Response: Declare SQLSTATE only as CHAR(5) and
# SQLCODE only as INTEGER. Do not assign the null value to
# SQLCODE or SQLSTATE.

<table>
<thead>
<tr>
<th>DSNH20008I UNSUPPORTED OPTION keyword SPECIFIED</th>
</tr>
</thead>
</table>
| Explanation: keyword is a deprecated feature that was sup-
| ported in releases prior to DB2 Version 6, and is no longer
| supported. |
| For indexes, only one type is currently supported — type 2. |
| Severity: 8 (error) |
| System Action: The statement cannot be executed. |
| User Response: Correct the syntax of the SQL statement to
| remove reference to the unsupported keyword. Refer to the
| DB2 SQL Reference for more information. |
| Destination: 560A9 |
## DSNI... Messages

<table>
<thead>
<tr>
<th>Message</th>
<th>Description</th>
<th>Explanation</th>
<th>System Action</th>
<th>User Response</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DSNI001I</strong></td>
<td>RESTART HAS BEEN DEFERRED REASON reason TYPE type NAME name</td>
<td>Restart could not be performed for one or more pages of the resource identified by type and name. Those pages are placed in the logical page list (LPL) and restart for those pages is deferred. The reason code explains why restart was not performed.</td>
<td>DB2 restart continues. Pages for which restart activity was not performed are put into the LPL.</td>
<td>Correct the problem indicated by the reason code. Then use the START DATABASE command or the RECOVER utility to remove the pages from the LPL.</td>
</tr>
<tr>
<td><strong>DSNI002I</strong></td>
<td>csect-name UNABLE TO START OBJECT TYPE object-type OBJECT NAME object-name REASON reason TYPE type NAME name</td>
<td>The resource identified could not be started because it was unavailable. The resource could be a database, a table space, an index space, or a partition within a table space or an index space. The 'object-type' identifies the type. The 'object-name' identifies the name. If the DB2 catalog is unavailable, 'object-type' contains binary zeros and 'object-name' contains blanks. The reason code identifies the type of the resource as well as the format and content of the name.</td>
<td>The specified database, table space, or partition is not started and remains in its current state. If there are other databases, spaces, or partitions to be started, they are processed normally.</td>
<td>Correct the problem specified by the reason code and reissue the -STOP command.</td>
</tr>
<tr>
<td><strong>DSNI003I</strong></td>
<td>csect-name UNABLE TO STOP OBJECT TYPE object-type OBJECT NAME object-name REASON reason TYPE type NAME name</td>
<td>The identified object could not be stopped because a resource required to perform the stop was unavailable. The object could be a database, a table space, an index space, or a partition within a table space or an index space. The 'object-type' identifies the type and 'object-name' identifies the name. If the DB2 catalog is unavailable, 'object-type' contains binary zeros and 'object-name' contains blanks. The reason code identifies the type of the resource as well as the format and content of the resource, name.</td>
<td>The specified database, space, or partition is not stopped and remains in the current state. If there are other databases, spaces, or partitions to be stopped, they are processed normally.</td>
<td>Correct the resource unavailable problem and reissue the -STOP command.</td>
</tr>
<tr>
<td><strong>DSNI004I</strong></td>
<td>RESOURCE HAS BEEN STOPPED TYPE type NAME name</td>
<td>The specified database, space, or partition is stopped by DB2.</td>
<td>The resource could not be recovered. For an explanation of resource type codes, see Resources on page 1053.</td>
<td>Previous messages provide information to allow you to determine the cause of the problem and the method of correcting it. Refer to them, and correct the problem. Then restart the database, table space, or index space using the -START command; and invoke the application again.</td>
</tr>
<tr>
<td><strong>DSNI005I</strong></td>
<td>csect-name LPL OR GRECP RECOVERY CANNOT BE DONE FOR START DATABASE COMMAND-ID = command-id OBJECT TYPE object-type OBJECT NAME object-name REASON reason TYPE type NAME name</td>
<td>The resource identified could not be recovered during a START DATABASE command identified by the command-id because of problems during LPL or GRECP recovery. The resource could be a table space, an index space, or a partition within a table space or an index space. The 'object-type' identifies the type. The 'object-name' identifies the name.</td>
<td>The 'command-id' is a decimal number that represents a START DATABASE command.</td>
<td>Correct the problem specified by the reason code and reissue the -START command.</td>
</tr>
</tbody>
</table>
**DSNI006I** csect-name ASYNCHRONOUS GRECP OR LPL RECOVERY IN PROGRESS FOR START DATABASE COMMAND-ID = command-id

**Explanation:** This message is issued in response to a START DATABASE command when the object (table space or index space) identified by TYPE and NAME had group buffer pool recovery pending (GRECP) or logical page list (LPL) status, and recovery was triggered.

The ‘command-id’ is a decimal number that represents a START DATABASE command.

Refer to Resource types on page 1053 for an explanation of resource type codes.

**System Action:** The object is started. Also, GRECP or LPL recovery is initiated. During LPL or GRECP recovery process, message DSNI022I might be issued periodically to indicate the recovery status. If the recovery completes successfully, message DSNI005I will indicate the error.

**User Response:** Wait for the DSNI021I or the DSNI005I message to be issued to the console. You can periodically issue a DISPLAY DATABASE RESTRICT command for the specified table space or index space to determine whether the GRECP or LPL exception state has been cleared.

**Explanation:** Refer to Appendix B, “Problem determination” on page 1051 for a table showing all types and names.

**Problem Determination:** Issue the -DISPLAY command to verify what got started.

**DSNI008I** DATABASE VALIDATION PROCEDURE name COULD NOT BE LOADED

**Explanation:** The database validation procedure identified by ‘name’ could not be loaded.

**User Response:** Correct the name, and rerun the application.

**DSNI009I** csect-name DATABASE EDIT PROCEDURE name COULD NOT BE LOADED

**Explanation:** The database edit procedure identified by ‘name’ could not be loaded.

**User Response:** Correct the name, and rerun the application.

**DSNI010I** BROKEN PAGE ACCESSED TYPE type NAME name MODNAME modname CONN-ID id CORR-ID id LUW-ID id

**Explanation:** The page identified by TYPE and NAME could not be accessed, because it is marked as logically broken.

The TYPE and NAME identify the resource that is currently unavailable. The TYPE code identifies the type of the resource as well as the format and content of the resource NAME.

Type codes ‘00000301’, ‘00000302’, and ‘00000303’ apply to this message. Refer to Appendix B, “Problem determination” on page 1051 for an explanation of resource type codes.

'csect-name' has encountered the logically broken page. CONN-ID, CORR-ID, and LUW-ID identify the thread involved in the problem. If the LUW-ID is an ‘-’, the thread originated at this site. Correlation IDs beginning with ‘nn’, where ‘nn’ is a number from 01 to 28, identify system agents.

**User Response:** If the TYPE is ‘00000300’, use NAME to determine if the page is in an index space or a table space. Use the REPAIR utility to fix the broken page. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Explanation:** Refer to Table 3 on page 1053 for an explanation of resource type codes.

**Problem Determination:** Correct the name, and rerun the application.

**DSNI011I** PAGE TEMPORARILY UNAVAILABLE TYPE type NAME name MODNAME modname ERQUAL erqual

**Explanation:** The page identified by TYPE and NAME has been temporarily marked as logically broken to prevent access until it can be recovered.

The TYPE and NAME identify the resource that is currently unavailable. The TYPE code identifies the type of the resource as well as the format and content of the resource NAME. Refer to Table 3 on page 1053 for an explanation of resource type codes.

The module named modname has called a page checking routine, which discovered an error in the page.

The ERQUAL gives the trace id for the error in the page. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**User Response:** Resubmit the utility, or reissue the START command, when the problem with the log has been resolved.

**System Programmer Response:** Run the print log map (DSNJU004) utility. This may be run with DB2 up or down. Find the data set that contains the requested RBA in the output of DSNJU004. If the required RBA is not in a listed data set, one of the following may have occurred:

- The data set was deleted from the bootstrap data set by a run of the change log inventory (DSNJU003) utility. In this case, rerun the utility to insert the missing data set name. DB2 must be down to run this utility.
- The bootstrap data set has been damaged. In this case, the BSDS must be restored from the dump that occurred with the most recent archive log data set. DSNJU003 must be run to supply changes that occurred during and after the last off-load operation. Changes may be determined from the operator's console listing.

If a listed log data set contains the required RBA, this message will be preceded by one or more error messages from the log manager (DSNJ). See these messages for appropriate action.

**Problem Determination:** Issue the -DISPLAY command to verify what got started.
Guide and Reference for information on identifying and reporting the problem.

System Action: Automatic recovery for the page has been scheduled. The current agent will abend with reason code '00C90105', and a dump will be taken. The page will be unavailable to this and other agents until the online recovery has completed successfully. Message DSNI010I will be issued, and a 'resource unavailable' condition will be returned to any agents that attempt to access the page. If the online recovery fails, the page will be marked as broken until it is repaired or recovered (see message DSNI012I).

User Response: Save the dump. Watch for message DSNB215I (indicating successful recovery of the page), or DSNI012I (indicating failure of recovery of the page).

DSNI012I PAGE LOGICALLY BROKEN TYPE type NAME name MODNAME modname ERQUAL erqual

Explanation: The page identified by TYPE and NAME is logically incorrect. Additional attempts to access the page will be denied.

The TYPE and NAME identify the resource that is currently unavailable. The TYPE code identifies the type of the resource as well as the format and content of the resource NAME. Refer to Table 3 on page 1053 for an explanation of resource type codes.

The module named 'modname' has called a page checking routine, which discovered an error in the page.

The ERQUAL gives the trace id for the error in the page. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem. An ERQUAL of 'X'0000' indicates that an unhandled occurred during online recovery or recover utility. The page has been marked as broken, and the recovery has failed.

System Action: The page is marked as logically broken, an 04E abend with reason code '00C90102' is issued, and a dump is taken. The page will be unavailable to this and other agents until it is repaired.

User Response: Save the dump for analysis by IBM Support Center. Copy the table space or index space to another data set for later analysis by IBM Support Center. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

System Programmer Response: See the System Programmer Response section of this message.

System Action: The job is abended shortly after this message appears.

User Response: Notify the system programmer.

Operator Response: Collect the console output from the system on which the job was run. Save this output for use in problem determination.

DSNI014I csect-name DATA IN USE DURING ABEND REASON 00C90101 ERQUAL erqual TYPE type NAME name CONN-ID id CORR-ID id LUW-ID id

Explanation: This message identifies a page that was in use at the time an abend condition occurred with reason code 00C90101. This message is issued for each page involved in the current operation.

ERQUAL identifies the specific abend in the CSECT that caused this message to be issued. This information and the reason code are used by IBM Support Center to identify the cause of the problem.

NAME and TYPE identify the page and its type. The TYPE code identifies the type, as well as the format and content, of the NAME. Refer to Appendix B, "Problem determination" on page 1051 for a table showing all types and names.

CONN-ID, CORR-ID, and LUW-ID together identify the thread involved in the problem. If the LUW-ID is an '***', the thread originated at this site. Correlation IDs beginning with 'nnn' where 'nnn' is a number from 01 to 28, identify system agents.

For further information, see the Explanation section for the abend reason code specified in this message.

System Action: The job abends with reason code 00C90101 after this message appears.

User Response: Notify the system programmer.

Operator Response: Collect the console output from the system on which the job was run. Save this output for use in problem determination.

System Programmer Response: See the System Programmer Response section of this message.

DSNI013I csect-name POTENTIALLY INCONSISTENT DATA REASON reason ERQUAL erqual TYPE type NAME name CONN-ID id CORR-ID id LUW-ID id

Explanation: This message identifies a page with potentially inconsistent data. This message is issued for each page involved in the current data manager operation. The 'csect-name' in the message identifies the CSECT that issued the message.

The 'erqual' in the message identifies the specific abend in the CSECT that caused this message to be issued. This information and the reason code are used by IBM Support Center to identify the cause of the problem.

'NAME' and 'type' identify the page and its type. The TYPE code identifies the type, as well as the format and content, of the NAME. Refer to Appendix B, "Problem determination" on page 1051 for a table showing all types and names.

CONN-ID, CORR-ID, and LUW-ID together identify the thread involved in the problem. If the LUW-ID is an '***', the thread originated at this site. Correlation IDs beginning with 'nnn' where 'nnn' is a number from 01 to 28, identify system agents.

For further information, see the Explanation section for the abend reason code specified in this message.

System Action: The job is abended shortly after this message appears.

User Response: Notify the system programmer.

Operator Response: Collect the console output from the system on which the job was run. Save this output for use in problem determination.

System Programmer Response: See the System Programmer Response section of this message.

Problem Determination: In general, the data in these pages is fine. However, if problems are reported that repeatedly involve the same pages or if the same pages are reported by other abends, you might want to analyze the set of pages involved.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
DSNI015I  OBJECT name IS ALREADY STARTED FOR RW ACCESS. THE OBJECT WILL REMAIN STARTED FOR RW ACCESS

Explanation: The -START DATABASE command with the ACCESS(FORCE) keyword was entered, but the object specified was already started for read/write access.

Severity: 8 (error)
System Action: The -START DATABASE command is not allowed to proceed.
User Response: Issue a -STOP DATABASE command to stop the object before attempting to start it.

DSNI016I  RESOURCE TYPE type NAME name MUST FIRST BE STOPPED BEFORE IT CAN BE STARTED IN A DIFFERENT ACCESS MODE

Explanation: When issuing the -START DATABASE command on the ROSHARE OWNER system, the object to be started must first be stopped before changing access modes. For example, if a table space in a database defined as ROSHARE OWNER is started for RW access, before it can be started for RO access it must be stopped via the -STOP DATABASE command. It can then be started for RO access via the -START DATABASE command.

Severity: 8 (error)
System Action: The -START DATABASE command is not allowed to proceed.
User Response: Issue a -STOP DATABASE command to stop the object before attempting to start it.

DSNI017I  RESOURCE TYPE type NAME name IS INCONSISTENT DUE TO ONE OR MORE PENDING STATES

Explanation: There are two possible reasons for this message:

1. The header page of a table space, index, or partition belonging to a database defined as ROSHARE OWNER could not be marked as consistent during the processing of the STOP DATABASE command because one or more of the following was true:
   • The table space, index, or partition is in recovery pending status.
   • The table space, index, or partition is in check pending status.
   • The table space, index, or partition has pages in the logical page list (LPL).
   • The table space, index, or partition status has a utility in progress (UTUT status on the output from a DISPLAY DATABASE command).
   • The table space, index, or partition has a utility in progress that allows read-only access (UTRO on the output from a DISPLAY DATABASE command).
   • An I/O error range exists.

2. A retained lock is held on the table space, index, or partition. The retained lock could be signifying a pending status.

If the STOP DATABASE command was issued without specifying the SPACENAM parameter, then one or more of the conditions stated above is true for one or more table spaces, indexes, or partitions in the specified database.

Severity: 4 (warning)
System Action: For case 1, if the STOP DATABASE command was specified with the SPACENAM parameter, the table space, index, or partition is stopped. DB2 does not allow access to an inconsistent table space, index, or partition by any ROSSHARE READ system.

For case 2, no access to an inconsistent table space, index, or partition is allowed until the retained lock is released by the failed system at completion of its restart.

User Response: Issue a DISPLAY DATABASE command to display the status of the object in question. Resolve the pending states and then reissue the STOP DATABASE command to ensure that the consistency indicator is reset.

DSNI018I  UNABLE TO GET LOCK FOR RESOURCE TYPE type NAME name. WILL RETRY TO GET LOCK.

Explanation: The resource identified by ‘type’ and ‘name’ could not be locked because of lock contention. The lock request is made again for this resource.

The ‘type’ and ‘name’ identify the resource trying to get a lock. The ‘type’ code identifies the type of resource as well as the format and content of the resource ‘name’.

Refer to Table 3 in Appendix B, “Problem determination” on page 1051 for an explanation of resource type codes.

Severity: 0 (informational)
System Action: The lock request is made again for the specified resource.

DSNI019I  THE STOP COMMAND FOR OBJECT name WAS OVERRIDDEN BY A START FORCE. THE STOP COMMAND IS IGNORED.

Explanation: The object identified by ‘name’ was not stopped because a START FORCE command on this object was subsequently issued and processed.

This message is informational only.

Severity: 0 (informational)
System Action: The object is not stopped.

DSNI020I  csect-name UNABLE TO DRAIN RESOURCE TYPE type NAME name. WILL RETRY DRAINING THE RESOURCE.

Explanation: The resource identified by ‘type’ and ‘name’ could not be drained. The ‘type’ code identifies the type of resource as well as the format and content of the resource ‘name’. The drain request is made again for this resource.

Refer to Table 3 in Appendix B, “Problem determination” on page 1051 for an explanation of resource type codes.

System Action: The drain request is made again for the specified resource.

DSNI021I  csect-name GRECP OR LPL RECOVERY FOR START DATABASE COMMAND-ID = command-id TYPE type NAME name HAS COMPLETED SUCCESSFULLY.

Explanation: The group buffer pool recovery pending (GRECP) or logical page list (LPL) exception state of the table space or index space identified by TYPE and NAME has been cleared.

The ‘command-id’ is a decimal number that represents a START DATABASE command.
Refer to "Resource types" on page 1053 for an explanation of resource type codes.

This message is always preceded by the DSNI006I message, which indicates the beginning of the LPL or GRECP recovery for the object.

System Action: The identified table space or index space is started normally.

**DSNI022I**  
```
csect-name LPL or GRECP RECOVERY LOG APPLY FOR START DATABASE COMMAND-ID = command-id AT LOGPOINT xxx TO LOGPOINT yyy
```

Explanation: This message periodically shows the progress of the LPL or GRECP recovery of a START DATABASE command.

The ‘command-id’ is a decimal number that represents a START DATABASE command.

The ‘xxx’ is the LOGPOINT of the log record currently being processed. The ‘yyy’ is the LOGPOINT of the last log record that will be applied in this recovery. The value of logpoint is RBA in a non-data sharing environment and LRSN in a data sharing environment.

This message, in combination with message DSNI006I, DSNI005I or DSNI021I, provides the LPL or GRECP recovery information for a START DATABASE command identified by the ‘command-id’.

System Action: The LOGAPPLY phase continues normally.

**DSNI023I**  
```
csect-name PAGE SET dbnam.psnam PART part IS RESTOP ON BEHALF OF UR urid. BACKOUT TO RBA rba IS REQUIRED.
```

Explanation: ‘Status’ is either RESTP (Restart Pending) or AREST (Advisory Restart Pending). This message indicates that the named UR has backout work pending against the named page set or partition. The backout work for this UR against this page set or partition will be complete once backward processing of the log reaches the identified RBA.

For non-partitioned page sets, the partition given in the message is the string n/a.

**DSNI024I**  
```
csect-name BACKOUT PROCESSING IS COMPLETE FOR PAGE SET dbnam.psnam PART part.
```

Explanation: This message indicates that backout processing is complete for the named table space, index space, or partition. If the object was in restrictive restart pending state, that state is lifted. If the object was in an advisory restart pending state, locks held on the object on behalf of postponed abort URs by the DB2 member issuing the message are released. The advisory restart pending state is lifted if the DB2 member issuing the message is the only member still contributing to the state.

For non-partitioned page sets, the partition given in the message is the string “n/a”.

**DSNI025I**  
```
csect-name THE FAST LOG APPLY PROCESS REQUIRES aaaaaaaa BYTES OF STORAGE, BUT GOT ONLY bbbbbbbb BYTES
```

Explanation: The Fast Log Apply process could not obtain all the required storage. However, the storage acquired is enough for the Fast Log Apply process to continue.

Severity: 0 (informational)

System Action: The Fast Log Apply process continues with the smaller amount of storage for the log buffers.

**DSNI026I**  
```
csect-name THE FAST LOG APPLY PROCESS IS DISABLED BECAUSE ALL OF THE ALLOWABLE STORAGE IS EXHAUSTED
```

Explanation: There is no ssnmDBM1 storage available for the Fast Log Apply process to use. There are too many jobs (RECOVER or -START DB command) running in parallel.

Severity: 0 (informational)

System Action: The recovery of the requested objects continues without the Fast Log Apply process.

**DSNI027I**  
```
csect-name THE FAST LOG APPLY PROCESS IS DISABLED BECAUSE IT IS UNABLE TO ACQUIRE THE MINIMUM REQUIRED STORAGE
```

Explanation: There is not enough ssnmDBM1 storage available or reserved for the Fast Log Apply process to use.

Severity: 0 (informational)

System Action: The recovery of the requested objects continues without the Fast Log Apply process.

**DSNI030I**  
```
csect-name BACKOUT PROCESSING IS CONTINUING BEYOND THE REQUESTED LIMIT DUE TO CATALOG OR DIRECTORY ACTIVITY OF UR urid.
```

Explanation: The number of log records requested to be processed during restart’s backward phase have been processed. Under other circumstances further backout processing would be postponed. However, because the indicated UR has catalog or directory updates that are not backed out yet (and because backout against catalog or directory page sets cannot be postponed), backout processing is continuing. It will continue until this UR’s backout is complete.

System Action: Backout processing continues.

```
# DSNI031I  csect-name - LOCK ESCALATION HAS OCCURRED FOR RESOURCE NAME = name, LOCK STATE = state, PLAN NAME : PACKAGE NAME = id1:id2, STATEMENT NUMBER = id3, CORRELATION-ID = id4, CONNECTION-ID = id5, LUW-ID = id6, THREAD-INFO = id7:id8:id9:id10
```

Explanation: Lock escalation balances concurrence with performance by using page locks while a process accesses relatively few pages, then changing to table space or table locks when the process accesses a number of pages that exceeds a defined threshold (LOCKMAX) for the tablespace.

# name The name of the escalated resource.
| **state** | The lock state (after escalation) of the escalated resource. |
| **id1** | The name of the executing plan associated with this thread. |
| **id2** | The name of the executing package (if any) associated with this thread. |
| **id3** | The statement number of the executing SQL statement associated with this plan. |
| **id4** | The correlation identifier of the thread associated with the escalated resource. |
| **id5** | The connection identifier of the thread associated with the escalated resource. |
| **id6** | The logical-unit-of-work identifier of the thread associated with the escalated resource. |
| **id7** | Thread Info - the primary authorization_id associated with the thread. |
| **id8** | Thread Info - Work station name of the end user's work station. An asterisk (*) indicates that it is not relevant to the thread or was not provided by the client. |
| **id9** | Thread Info - User-Id of the end user. An asterisk (*) indicates that it is not relevant to the thread or was not provided by the client. |
| **id10** | Thread Info - Application name of the end user's application. An asterisk (*) indicates that it is not relevant to the thread or was not provided by the client. |

**System Action:** Escalation has occurred for the specified object.
DSNJ... Messages

DSNJ001I  csect-name CURRENT COPY n ACTIVE LOG DATA SET IS DSNAME=..., STARTRBA=..., ENDRBA=...

Explanation: This message is generated for one of two reasons:

1. When the log manager is initialized, it sends this informational message to identify the current active log data sets (copy-1 and, if dual logging is used, copy-2).
2. When the current active log data set is full, DB2 will switch to the next available active log data set. This message identifies the next available active log data set which will be used for logging.

The value specified by the STARTRBA=value keyword is the RBA of the first byte of log data in the named data set. The value specified by the ENDRBA=value keyword is the RBA of the last possible byte in the data set. These values may later be needed for a conditional restart.

System Programmer Response: None required. However, if recovery is required, information from this message may be required as input to the change log inventory (DSNJU003) utility.

DSNJ002I  FULL ACTIVE LOG DATA SET DSNAME=..., STARTRBA=..., ENDRBA=...

Explanation: This message is sent at the time the log manager fills an active log data set and switches to a new empty data set. The message shows the name and log RBA range of the full data set.

System Programmer Response: None required. However, if recovery is required from information from this message may be required as input to the change log inventory (DSNJU003) utility.

DSNJ003I  csect-name FULL ARCHIVE LOG VOLUME DSNAME=..., STARTRBA=..., ENDRBA=..., STARTxxxx=..., ENDxxxx=..., UNIT=..., COPYnVOL=..., VOLSPAN=..., CATLG=...

Explanation: Offloading for the specified archived log data set was successfully completed for the given volume. If the data set spans multiple tape volumes, this message is generated for each tape volume. If the data set spans multiple data sets, only one message will be generated displaying the first VOLSER appended with a ‘+’ to indicate the data set spans multiple volumes. ‘xxxx’ is replaced by either TIME or LRSN.

System Action: An archive log data set has been created, and the archive log data set inventory in the bootstrap data set (BSDS) has been updated with the information in the message:

DSNAME The name of the archive log data set.
STARTRBA The starting RBA contained in the volume.
ENDRBA The ending RBA contained in the volume.
STARTLRSN The starting LRSN contained in the volume for data sharing systems.
ENDLRSN The ending LRSN contained in the volume for data sharing systems.

The BSDS is automatically updated with the information contained in this message; however, if recovery is required, information from this message may be required as input to the change log inventory (DSNJU003) utility.

DSNJ004I  ACTIVE LOG COPY n INACTIVE, LOG IN SINGLE MODE, ENDRBA=...

Explanation: This message is sent when the dual active logging option is selected and copy ‘n’ becomes inactive. A log copy becomes inactive when the next active log data set is not ready when required. ENDRBA is the last byte of log data written on copy ‘n’. This is usually caused by a delay in off-load.

System Action: The log is switched to single mode until the next data set for copy ‘n’ is ready for logging.

If DB2 is shut down or abends while in single mode with the ZPARM option still set for dual active data sets, the previous state of the active log data sets determines what happens when DB2 is started, as follows:

- If fewer than two data sets are available (not flagged as STOPPED) for each set of active logs, DB2 startup terminates and message DSNJ112E is issued.
- If an active log data set is in NOTREUSABLE state, DB2 can be started in single logging mode, but dual mode takes effect when the other active log data set becomes available after offloading.

Operator Response: Execute an MVS Display System Requests command (D R,L for example) to ensure that there are no outstanding requests that are related to the log off-load.
process. Take the necessary action to satisfy any requests, and permit off-load to continue.

System Programmer Response: If the switch to single mode was caused by the lack of a resource required for off-load, the necessary resource should be made available to allow off-load to complete and thus permit dual logging to proceed. If recovery is required, information from this message might be required as input to the change log inventory (DSNJU003) utility.

**DSNJ005I  ACTIVE LOG COPY n IS ACTIVE, LOG IN DUAL MODE, STARTRBA=...**

**Explanation:** This message is sent when copy ‘n’ of the log becomes active after previously being flagged as inactive. STARTRBA is the RBA of the first byte of log data written on copy ‘n’ after it was activated.

System Programmer Response: None required. However, if recovery is required, information from this message may be required as input to the change log inventory (DSNJU003) utility.

**DSNJ006I  ALLOCATION FOR NEW ARCHIVE LOG DATA SET HAS BEEN CANCELLED BY OPERATOR.**

**Explanation:** This message is sent if the operator answers ‘N’ to the WTOR message DSNJ008E.

System Action: If the allocation is for copy 1 archive log data set, off-load terminates processing until the next time it is activated. If copy 1 has already been allocated and this request is for copy 2, off-load switches to single off-load mode for this data set only.

**DSNJ007I  csect-name OPERATOR CANCELED MOUNT OF ARCHIVE VOL SER= volser**

**Explanation:** If the operator answers ‘N’ to the WTOR message DSNJ009I, this message is issued. The variable ‘volser’ is the volume serial of an archive log volume required for the read request.

System Action: The read request for the archive log volume fails. If the request was issued with the COND=YES parameter, return code 12 and reason code 00D1032B are returned to the requester. Otherwise, DB2 abends with reason code 00D1032B.

**DSNJ008E  nn OF mm ACTIVE LOGS ARE FULL. ssname NEEDS ARCHIVE SCRATCH. REPLY ‘Y’ WHEN DEVICE READY OR ‘N’ TO CANCEL.**

**Explanation:** The installation has requested WTOR before archive log data set allocation. DB2 needs the specified archive volume for a read operation. The subsystem name is ‘ssname’.

System Action: The archive log read service task waits for the operator’s reply. This wait affects the agent for which the log read was issued and any other agents that might be waiting on the log read service task queue.

Operator Response: Locate the requested volume, ensure that a device is available, and reply ‘Y’. DB2 continues with dynamic allocation and then begins reading the log.

If dual archiving is in effect, a response of ‘N’ causes archive read to reissue the message for the copy ‘Z’ copy 2 archive VOLSER with the same RBA range. A response of ‘N’ to this second WTOR, or to the initial WTOR for single archiving, causes the archive read service task to fail with unpredictable results.

**DSNJ010I  csect-name INVALID RESPONSE. WTOR WILL BE REPEATED.**

**Explanation:** A WTOR was issued during archive data set allocation. The user did not respond correctly to the message. Either ‘Y’ or ‘N’ must be entered.

System Action: The original WTOR is repeated.

Operator Response: Reply as indicated in the repeated message.

**DSNJ011I  CONDITIONAL RESTART RECORD rrr CREATED AT .... WAS FOUND. REPLY ‘Y’ TO USE, ‘N’ TO CANCEL.**

**Explanation:** When the log manager was initialized, a conditional restart control record was found in the bootstrap data set. Both the record identifier (a 4 byte hexadecimal number) and the creation time stamp (yy.ddd hh:mm) are displayed to help identify the conditional restart record which will be used. If you want a conditional restart using that record, reply ‘Y’ to the message. Otherwise, reply ‘N’ and notify the system programmer.
System Action: If 'Y' is the response, DB2 is started conditionally, using the record found. If 'N' is the response, DB2 startup is terminated.

Operator Response: If a DB2 conditional restart is to be done and if the date and time displayed are correct, then reply 'Y' to the outstanding message. If you are not sure, then contact the system programmer.

System Programmer Response: If a normal restart of DB2 has failed and you have created a conditional restart control record with the change log inventory (DSNJU003) utility, check whether the date and time in the message agree with when you created that record. If they do, reply 'Y' to the outstanding WTOR. If they do not, reply 'N' and investigate the discrepancy.

**DSNJ012I** ERROR ccc READING RBA rrr IN DATA SET ddd CONNECTION-ID=xxxxxxxxx, CORRELATION-ID=yyyyyyyyyyyy

Explanation: While scanning log records read into a buffer, the log manager detected a logical error with reason code 'ccc'. 'rrr' is the log RBA of the segment in the buffer at which the error was detected. 'ddd' is the name of the active or archive log data set from which the record was read. If 'ddd' is blank, the data was read from an active log output buffer.

The connection and correlation IDs identify the user or application that encountered the problem. Messages that have the same connection ID and correlation ID relate to the same user. Correlation IDs beginning with '0nn' where 'nn' is a number from 01 to 28, identify system agents.

Refer to Section 4 (Volume 1) of DB2 Administration Guide for information about recovery from log failures.

System Action: The application program that invoked the log manager is terminated with reason code 'ccc'. However, information in this message may be useful in diagnosing the abend that will follow.

**DSNJ013I** TERMINAL ERROR ccc IN BUFFER rrr BEFORE ACTIVE LOG WRITE

Explanation: A scan of the log output buffer just prior to writing the buffer detected an inconsistency in the log data. 'ccc' is the abend reason code associated with the SDUMP that is produced. 'rrr' is the log RBA at which the error was detected.

System Action: DB2 will terminate with a dump, and will not write the damaged buffer to either COPY 1 or COPY 2 active log data set.

Operator Response: Notify the system programmer. Start DB2 after it terminates.

System Programmer Response: Because the damaged buffer has not been written to a log data set, DB2 may be restarted. No corrective action is required.

**Problem Determination:** In the DB2 formatted block section of the dump, locate the chain of LBCE blocks. Those are log buffer control elements, and each LBCE controls one 4KB log output buffer. LBCEBUFF, at offset X '20' in the LBCE, points to the buffer, which is always on a 4KB boundary. The log RBA of the first byte of the buffer is in a 6-byte field at offset X 'FF2' in the buffer itself. The layout of the buffer is described by the DSNDLCID mapping macro. The header of each record within the buffer is described by the DSNDLRH mapping macro. Locate the buffer that contains the log RBA from the message and find the damage by referring to the description of the reason code later in this book.

**DSNJ014I** TERMINAL ERROR ccc IN BUFFER rrr AFTER ACTIVE LOG WRITE.

Explanation: A scan of the log output buffer, after writing to the COPY 1 active log data set and before writing to COPY 2, detected an inconsistency in the log data. 'ccc' is the abend reason code associated with the SDUMP that is produced. 'rrr' is the log RBA at which the error was detected.

System Action: DB2 will terminate with a dump, and will not write the damaged buffer to the COPY 2 data set.

Operator Response: Notify the system programmer.

System Programmer Response: The block containing the indicated log RBA may be damaged. The buffer was found to be in error at the completion of the write to the COPY 1 data set of the active log.

If dual active logs are being used, use print log map (DSNJU004) to list the active log data sets for both copies of the active log. Find the COPY 2 data set with the corresponding RBA, and copy that data set (using access method services REPRO) to the COPY 1 data set. Start DB2.

If only a single active log is used, contact the IBM support center for assistance. An attempt to start DB2 may succeed if the damage to the buffer occurred after completion of the write to DASD.

**Problem Determination:** In the DB2 formatted block section of the dump, locate the chain of LBCE blocks. Those are log buffer control elements, and each LBCE controls one 4KB log output buffer. LBCEBUFF, at offset X '20' in the LBCE, points to the buffer, which is always on a 4KB boundary. The log RBA of the first byte of the buffer is in a 6-byte field at offset X 'FF2' in the buffer itself. The layout of the buffer is described by the DSNDLCID mapping macro. The header of each record within the buffer is described by the DSNDLRH mapping macro. Locate the buffer that contains the log RBA from the message and find the damage by referring to the description of the reason code later in this book.

**DSNJ015I** CSRONLY PROHIBITS LOG ALTERATIONS, RECORD rrr CREATED .... REPLY Y TO USE, N TO CANCEL.

Explanation: During DB2 startup, the log manager found an inactive conditional restart control record in the bootstrap data set. Because this control record indicates CSRONLY, no log data sets will be modified. If log truncation was specified, it will be simulated. Only the first phase of restart (current status rebuild) will be performed. The hexadecimal identifier (rrr) and creation timestamp (yy.ddd hh:mm) identify the record found.

System Action: A 'Y' reply will continue the conditional restart. A 'N' reply will terminate DB2 startup.

Operator Response: To continue this CSRONLY processing, reply 'Y' to this message. If you are not sure, contact the system programmer.

System Programmer Response: The conditional restart control record will not be deactivated at the end of the CSRONLY processing. To deactivate this record, either cancel this record or create a new record. Refer to Section 4 (Volume 1) of DB2 Administration Guide for more information.
**DSNJ020I** csect-name RECEIVED REPLY OF N TO msg-num. SUBSYSTEM STARTUP IS TERMINATED.

**Explanation:** The operator chose to terminate DB2 startup by answering ‘N’ to ‘msg-num’.

**System Action:** DB2 will not restart.

**Operator Response:** To restart DB2, follow the ‘operator response’ of ‘msg-num’.

---

**DSNJ030I** RBA RANGE startrba TO endrba NOT AVAILABLE IN ACTIVE LOG DATA SETS

**Explanation:** Previous errors have made the active log data set(s) that contain the relative byte address (RBA) range reported in the message unavailable to DB2. The status of these log(s) is STOPPED in the bootstrap data set (BSDS).

**System Action:** DB2 terminates with a dump.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** The log RBA range must be available for DB2 to be recoverable. Correct previous errors and restore the active log data set(s) that contain the RBA range reported in the message.

- If the log data set(s) are recoverable, the active log data set inventory in the BSDS must be modified to reset the STOPPED status. Use the print log map (DSNJU004) utility to obtain a copy of the BSDS log inventory. Next, use the change log inventory (DSNJU003) utility to delete the active log data sets marked STOPPED (use the DELETE statement), and then add them again (use the NEWLOG statement). The starting and ending RBA for each active log data set must be specified on the NEWLOG statement when the log(s) are added back to the BSDS using the DSNJU003 utility.

- If the log data set(s) are not recoverable, it is necessary to conditionally restart DB2. See Section 4 (Volume 1) of **DB2 Administration Guide** for additional information on conditional restart and recovering from log failures.

**Problem Determination:** Examine previous messages to determine the reason the active log data set(s) are unavailable to DB2.

---

**DSNJ050I** LOAD MODULE DSNJL003 DOES NOT HAVE RMODE(24) ATTRIBUTE

**Explanation:** The named load module was not link edited with the required RMODE(24) attribute.

**System Action:** DB2 startup is terminated.

**Operator Response:** Notify the system programmer of the failure.

**System Programmer Response:** Verify that all installation and maintenance activities against this module were executed using SMP. Verify that the JCLIN for SMP includes the correct RMODE control statement, and that the Linkage Editor provided with the Data Facility Product (DFP) for the version of MVS being used was invoked by SMP for the link edits. Correct the procedure or JCL which caused the error and rerun the necessary SMP jobs.

**Problem Determination:** The MVS service aid AMBLIST provides Linkage Editor module attributes in the summary section of the LISTLOAD function output.

---

**DSNJ070I** csect-name ARCHIVE LOG DSN PREFIX NOT IN PROPER FORMAT TO RECEIVE TIMESTAMP DATA. TIMESTAMPING OF dsnname BYPASSED

**Explanation:** By way of a ZPARM parameter, the user has specified that the date and time of creation of an archive log data set be included as part of the archive log data set name (DSN). To accomplish this, the DB2 subsystem requires that the length of the archive log data set name prefix not exceed 19 characters if using the standard DATE format (YYYYDDDD), or 17 characters if using the extended DATE format (YYYYYDDDD). If the prefix requirement is not met, this message is issued just prior to the allocation of the archive log data set specified in the message.

**System Action:** The archive log data set will be allocated using the archive log prefix. However, the archive log DSN will not contain the date and time as the user requested.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** The ZPARM parameters for the log archive function must be changed. Specifically, the TSTAMP and ARCSEXn fields are not consistent with one another. For details concerning the course of action required to eliminate this problem, refer to Section 2 of **DB2 Installation Guide**, under the DSNTIPN panel and DSN6ARVP macro subtopics.

---

**DSNJ071I** csect-name TIMER FAILURE CAUSED TIMESTAMPING OF ARCHIVE dsnname TO BE BYPASSED

**Explanation:** By way of a ZPARM parameter, the user has specified that the date and time of creation of an archive log data set be included as part of the archive log data set name (DSN). However an attempt to get the current date and time from the system failed. This message is issued just prior to the allocation of the archive log data set specified in the message.

**System Action:** The archive log data set will be allocated using the archive log prefix. However, the archive log DSN will not contain the date and time as the user requested.

---

**DSNJ072E** ARCHIVE LOG DATA SET dsnname HAS BEEN ALLOCATED TO NON-TAPE DEVICE AND CATALOGED. ZPARM CATALOG OPTION OF ‘NO’ HAS BEEN OVERRIDDEN.

**Explanation:** By way of an archive log DSNZPARM parameter, the user specified that all archive log data sets should be uncataloged (CATLG=NO). However, DB2 requires that all archive log data sets allocated to nontape devices must be cataloged. The archive log data set specified by ‘dsnname’ has been allocated to a nontape device, and has thus been cataloged. The user’s DSNZPARM CATLG setting of ‘NO’ has been overridden.

**System Action:** The archive log data set has been allocated to a nontape device, and has been cataloged. The DSNZPARM CATLG=NO setting has been overridden. The BSDS reflects that the data set has been cataloged.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** The DSNZPARM parameters for the log archive function must be changed. Specifically, the ARCHCTLG and ARCHDEV fields are not consistent with one another. For details concerning the course of action required to eliminate this problem, refer to Section 2 of **DB2 Installation Guide**.
Installation Guide under the DSNTIPA panel and DS6ARVP macro subtopics.

**DSNJ073I** LOG ARCHIVE UNIT ALLOCATION FAILURE DETECTED, RETURN CODE=nnnn. ALLOCATION OR OFF-LOAD OF ARCHIVE LOG DATA SET MAY FAIL.

**Explanation:** While building the SVC99 text entries to dynamically allocate a new archive log data set, a unit allocation failure was detected. This message is only generated when a trace for IFCID 320 is active. The reason code, indicated by 'nnnn' in the message, further clarifies the problem as follows:

- **4 (X'04')** The device type (unit name) on which the archive log data set is to be allocated is specified by the user in the DB2 system parameters. No UCBs could be found for the device type (unit name).
- **8 (X'08')** The device type (unit name) on which the archive log data set is to be allocated is specified by the user in the DB2 system parameters. This device type (unit name) could not be found in the MVS eligible device table (EDT).
- **32 (X'20')** DB2 was able to obtain a list of devices corresponding to the device type (unit name) specified in ZPARMs. However, it was determined by DB2 that this list contained a mixture of tape and nontape devices.
- **40 (X'28')** The device type (unit name) specified by the user in ZPARMs is valid. However, no devices are currently associated with the given device type (unit name).
- **44 (X'2C')** The device type (unit name) specified by the user in ZPARMs is valid. However, no DASD volumes are available with a volume use attribute of ‘storage’.
- **48 (X'30')** The CVT indicates that UCB services are not available.

**System Action:** This message is issued by DB2 after the SVC99 text entries are built, but prior to the allocation of the new archive log data set. As a result of the error, the dynamic allocation of the archive log data set will be attempted using standard default values. The standard default values are generally acceptable; however, the allocation may fail or the subsequent off-load may produce undesirable processing results. For example:

- A return code of 4 or 44 (X'2C') will foretell an allocation error (DSNJ103I) when the SVC99 is issued for the archive data set.
- Off-load processing to tape may fail. DB2 uses a volume count of 20 when allocating to tape, and uses the standard MVS volume count default of 5 volumes when writing to nontape devices. In the case of most of the above errors, it would be impossible for the DB2 subsystem to determine the device type on which the data set is to be allocated. Therefore, the standard MVS default is assumed for the volume count. If the data set is successfully allocated to a tape device, and the volume of data is such that more than five volumes will be used for the archive data set, the off-load processing will receive an MVS ABEND 837-08 with message IEC028I when attempting to write to the sixth tape volume.
- Off-load processing to a direct access device may fail. When allocating a new archive log data set on a direct access device, the DB2 subsystem will use a unit count to facilitate multivolume archive data sets. With most of the above errors, it may be impossible for the DB2 subsystem to correctly determine the type of device on which the data set is to be allocated. Therefore, the standard default (1) is assumed for the unit count. If the data set is successfully allocated to a direct access device, and during the off-load processing it becomes necessary to extend the data set to another device, the off-load processing will receive an MVS B37 (out of space) ABEND, and the archive log data set will be deallocated.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** The required action is based on the return code indicated in the message.

- **4 (X'04') or 8 (X'08')** The most likely cause is an incorrect specification in the archive log ZPARMs (DSNTIPA panel). Correct the DEVICE TYPE field. If the DEVICE TYPE field from the archive log ZPARMs appears to be correct, check the EDT to ensure that the esoteric or generic unit name specified in the ZPARMs is actually in the EDT. Subsequent off-load processing will archive the log data which could not be previously archived due to the allocation failure (DSNJ103I).
- **32 (X'20') or 40 (X'28')** To correct this situation, change the archive log DEVICE TYPE ZPARM to use a device type (unit name) which contains homogenous devices, or modify the device list associated with the device type (unit name) via a system generation to supply a list of homogenous devices.
- **44 (X'2C')** To correct this situation, issue an MVS mount command to change the volume use attribute of a mounted ‘private’ volume to ‘storage’. If this is a recurring problem, a system generation may be required to add permanently resident volumes with a volume use attribute of ‘storage’ to the esoteric or generic unit, or ZPARMs may have to be changed to use a different esoteric or generic unit name for the DEVICE TYPE (on the DSNTIPA installation panel).

**DSNJ097E** csect-name LOG TRUNCATION BY ENDLRSN IS ONLY VALID IN DATA SHARING.

**Explanation:** ENDLRSN was specified in the active conditional restart control record but this DB2 is not a member of a data sharing group.

**System Action:** DB2 startup is terminated.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Run the Change Log Inventory (DSNU003) utility with the CRESTART CANCEL parameters to cancel the conditional restart control record. Restart DB2.
DSNJ098E  csect-name  CRCTR ENDLRSN OF \( r r \) IS \( x x x \) THAN ANY KNOWN LRSN, NO TRUNCATION WILL OCCUR

Explanation: Truncation cannot take place because the CRCTR ENDLRSN is not in the range of LRSN values known to either the active or archive logs. \( r r \) is the end LRSN specified in the active record. \( x x x \) is replaced by either HIGHER or LOWER. If HIGHER is the case, the CRCTR ENDLRSN is higher than the LRSN of the last record written to the log data sets. LOWER means the CRCTR ENDLRSN is lower than the starting LRSN of the oldest archive data set.

System Action: DB2 startup is terminated.

Operator Response: Notify the system programmer.

System Programmer Response: Confirm that the ENDLRSN value specified in the Conditional Restart control record is correct. If it is not correct, run the Change Log Inventory (DSNJU003) utility with the CRESTART CANCEL parameters to cancel the conditional restart. If log truncation is desired, run the the DSNJU003 utility with the correct ENDLRSN. Restart DB2.

DSNJ099I  LOG RECORDING TO COMMENCE WITH STARTRBA=...  

Explanation: This message is generated when the log manager is initialized during DB2 startup. The value specified by the STARTRBA=value keyword is the RBA of the next byte of log data to be recorded in the DB2 active log data set(s). This information may later be needed for a conditional restart. This message is preceded by one DSNJ001 message (if single logging) or two DSNJ001 messages (if dual logging).

System Programmer Response: None required. However, if recovery is required, information from this message may be required as input to the change log inventory (DSNJU003) utility.

DSNJ100I  csect-name  ERROR OPENING BSDS\( n \)  

DSNAME=...,  
ERROR STATUS=\( \text{eeii} \)  

Explanation: Log manager initialization or the -RECOVER BSDS command could not open the specified bootstrap data set (BSDS). BSDS\( n \) matches the ddname in the log startup JCL of the data set that cannot be opened. The value of \( n \) is 1 or 2. Refer to Section 4 (Volume 1) of DB2 Administration Guide for information about recovery from BSDS or log failures.

System Action: When this error occurs at initialization time, DB2 startup must be terminated, because the log data sets cannot be determined and allocated without the BSDS. When this error occurs during -RECOVER BSDS processing, the command is terminated, and the system continues in single BSDS mode.

Operator Response: Notify the system programmer.

System Programmer Response: Recover the BSDS that cannot be opened. Normally, if dual BSDSs are being used, recovery consists of making a copy of the remaining good BSDS.

Problem Determination: The 'error status' contains the VSAM open return code in 'ee', and the VSAM open reason code in 'ii'. Refer to DFSMS/MVS: Macro Instructions for Data Sets for a list of the VSAM open return codes and reason codes, and the steps required to take corrective action.

DSNJ101E  csect-name  CRCTR RBA OF \( r r \) IS \( x x x \) THAN ANY KNOWN RBA, BUT COLD START WAS NOT SPECIFIED

Explanation: Truncation cannot take place because the CRCTR end RBA is not in the range of RBA values known to either the active or archive logs. \( r r \) is the end RBA specified in the active record. \( x x x \) is replaced by either HIGHER or LOWER. If HIGHER is the case, the CRCTR end RBA is higher than the end RBA of the most recent active log data set. LOWER means the CRCTR end RBA is lower than the starting RBA of the oldest archive data set.

System Action: DB2 startup is terminated.

Operator Response: Notify the system programmer.

System Programmer Response: Most likely, the archive log data set that contained the requested RBA has been deleted from the bootstrap data set (BSDS) by the change log inventory (DSNJU003) utility. Locate the output from an old Print Map run, and identify the data set that contains the missing RBA. If the data set has not been reused, run the DSNJU003 utility to add this data set back into the inventory of log data sets. Restart DB2.

DSNJ102I  LOG RBA CONTENT OF LOG DATA SET DSNAME=..., STARTRBA=..., ENDRBA=...,  
DOES NOT AGREE WITH BSDS INFORMATION

Explanation: The log RBA range shown in the BSDS for the specified data set does not agree with the content of the data set. This message indicates that the change log inventory (DSNJU003) utility was used incorrectly or that a down-level volume is being used.

System Action: DB2 startup processing is terminated.

Operator Response: Notify the system programmer.

System Programmer Response: Use the print log map (DSNJU004) and change log inventory (DSNJU003) utilities to make the BSDS consistent with the log data sets.

DSNJ103I  csect-name  LOG ALLOCATION ERROR  
DSNAME=dsname,  
ERROR STATUS=\( \text{eeii} \),  
SMS REASON CODE=ssssssss

Explanation: The log manager encountered an error while attempting to allocate the active or archive log data set indicated by the DSNAME=keyword. The STATUS=keyword indicates the error reason code returned by MVS dynamic allocation (SVC99).

This message might be preceded by message DSNJ073I.

System Action: Subsequent log manager actions are based upon the type of data set involved.

For active log data sets, if the error is encountered during log manager initialization, DB2 startup is terminated. If two copies of the active log data sets are defined, this message appears only once.

For archive log data sets, if two copies of the archive log data sets are defined, processing continues on the remaining archive log data set.

Operator Response: Notify the system programmer.

System Programmer Response: The error status portion of this message contains a 2-byte error code (S99ERROR) followed by the 2-byte information code (S99INFO) from the
SVC99 request block. If the S99ERROR code indicates an SMS allocation error (97XX), then ‘sssssss’ contains additional SMS reason code information obtained from S99ERSN.

Refer to OS/390 MVS Programming: Authorized Assembler Services Guide for a description of these codes.

For active log data sets, if the problem occurred during DB2 initialization, you can resolve the problem by either:

- Resolving the error associated with the active log data set as indicated by STATUS=keyword
- Using AMS, providing another copy of the active log data set
- Updating the BSDS with the change log inventory (DSNJU003) utility
- Restarting DB2.

For archive log data sets:

- If the problem occurred during allocation with the intent to write the data set, no immediate action is required. However, failure to resolve the SVC99 error (indicated by the status value in the message) might eventually cause the available space in the active log to be exhausted (DSNJ111E), since all future off-loads might fail due to the same error.
- If the problem occurred during allocation with the intent to read the data set, determine the problem, and use the DSNJU003 utility DELETE function to delete the archive log data set from the BSDS archive log inventory. Then use the NEWLOG function to add the data set back into the archive log inventory, pointing to the correct volume and device.

If additional information is required about recovery from log failures, refer to Section 4 (Volume 1) of DB2 Administration Guide.

This message can also be issued as the result of a possible user error. If the STATUS=keyword displays a value of ‘17080000’, then the site might have one or more active log data sets defined in the BSDS, but not allocated on DASD. To correct the situation, print the contents of the current active log data set inventory using the print log map (DSNJU004) utility, and then do one of the following:

- For each active log data set listed in the BSDS, but not actually allocated on DASD, allocate the active log data set using access method services. The access method services command syntax for active log data sets can be found in the DSNTIJIN installation job stream.
- Use the DSNJU003 utility DELETE statement to delete the errant active log data set name, and the NEWLOG statement to add the correct name to the active log data set inventory. The name specified on the NEWLOG statement must be the same as the name of the actual DB2 active log data set allocated on DASD.

The appropriate VSAM publication for a definition of these values.

- If the OPEN was for a non-VSAM data set, the error status is zero.
- For MMSRV errors, error status contains the error information returned by media manager services. If an MMSRV CATUPDT failure occurs attempting to truncate an active log data set, the log data set will be unavailable to DB2 and the status of the log data set will be flagged as ‘STOPPED’ in the BSDS.
- For VSAM OPEN and MMSRV errors, this message is preceded by an IEC161I message that defines the error that occurred.
- For a PROTECT of an archive log data set, the return code is from DADSM PROTECT. Refer to the appropriate MVS publication for a description of the MMSRV return codes.
- For a CLOSE of an archive log data set, the return code is the TCB completion code for an abend received during CLOSE processing. This abend is normally preceded by an IEC210I or IEC212I message that defines the error.
- For EDTINFO and UCBLOOK errors, the first 2 bytes contain the return code and the second 2 bytes contain the reason code.

Refer to Section 4 (Volume 1) of DB2 Administration Guide for information about recovery from log failures.

System Action: If this condition is encountered during log manager initialization, DB2 startup is terminated. If the error occurs later and the data set is needed either for offload or for input operations, DB2 processing continues. If a second copy of the data is available, DB2 attempts to allocate and open the second data set.

If the data set is needed as an active log data set, the log manager attempts to retry the failing request. If the retry fails, the DB2 subsystem is terminated.

Operator Response: Notify the system programmer.

System Programmer Response: If the error occurred during initialization, the installation must either correct the problem so that the data set is available or provide another copy of the data set and change the BSDSs to point to the new data set.

If the error occurred during DB2 processing, the return code should be reviewed and the appropriate action taken to correct the problem so that the data set can be used at a later time or the data set entry can be removed from the BSDS via the change log inventory (DSNJU003) utility.

If the error was received from PROTECT, there may be a problem with the PASSWORD data set. You should refer to the appropriate DADSM publication to determine the cause of the problem. When the problem has been corrected, you should ensure the archive log data sets receiving the error are added to the PASSWORD data set. If these archive log data sets are not added to the PASSWORD data set, archive read will fail when attempting to OPEN these data sets.

If the error was received from EDTINFO or UCBLOOK and the allocation for the archive log data set fails, verify that the archive UNIT names are correct in ZPARMs.

---

**Explanation:** DB2 encountered an error while issuing macro ‘macro-name’. Error status is the return code from the specified macro.

- For an OPEN of a VSAM data set, the return code in the error field of the access method services control block is included in this message as the error status value. Refer to
**Explanation:** The log manager encountered a write error in the specified active log data set. If `csect-name` is DSNJW107, the error occurred writing the log buffers to an active log data set. If `csect-name` is DSNNJ207, the error occurred while preformatting the next control area before writing log data into it.

Error status contains the error information returned by media manager in the form `ccccffffff`, where `cccc` is a 2-byte return code that describes the error, ‘ff’ is a 1-byte code that defines the functional routine that detected the error, and ‘ss’ is the 1-byte status code that defines a general category of error. Refer to the appropriate MVS publication for a description of the MMCALL return codes.

If the dual active logging option is selected, the log manager switches to the next data set for this copy. If the next data set is not ready, the log manager temporarily enters single logging mode and allocates a replacement data set for the one that encountered the error. Dual logging is resumed as soon as possible.

If single active logging option is selected and the next data set is not ready, the log manager waits for that data set to be available. In this case, log writing is inhibited until the replacement is ready for output.

**System Action:** See the Explanation section of this message.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** See the Explanation section of this message.

---

**Explanation:** The log manager encountered an error while reading an active log data set. The ‘error status’ contains the error information returned by the media manager in the form `ccccffffff`, where `cccc` is a 2-byte return code that describes the error, ‘ff’ is a 1-byte code that defines the functional routine that detected the error, and ‘ss’ is the 1-byte status code that defines a general category of error.

**System Action:** If another log data set contains the data, the log manager attempts to read from the other BSDS. If read from the second BSDS fails or if there is only one BSDS, an error code is returned to the log request that caused access to the BSDS.

If read error is detected during start-up, DB2 initialization process is terminated to prevent users from operating in a cripple mode. User should take action to correct the problem.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** It may be necessary to replace or repair the BSDS, depending on what conditions resulted from the read error. To replace a BSDS, first delete the bad BSDS, and then define the new BSDS with the same name and attributes. If a new name is used for the new BSDS, change the log startup JCL to specify the new BSDS name.

---

**Explanation:** The log manager encountered an error while reading the specified bootstrap data set. Error Status contains the VSAM return and feedback codes. It is a 2-byte field with the first byte containing the hexadecimal return code and the second containing the hexadecimal feedback code. Refer to the appropriate MVS publication for a description of VSAM return and reason codes.

If read error is detected during start-up, DB2 initialization process is terminated to prevent users from operating in a cripple mode. User should take action to correct the problem.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** It may be necessary to replace or repair the BSDS, depending on what conditions resulted from the read error. To replace a BSDS, first delete the bad BSDS, and then define the new BSDS with the same name and attributes. If a new name is used for the new BSDS, change the log startup JCL to specify the new BSDS name.

---

**Explanation:** The log manager encountered an error while writing to the specified bootstrap data set. Error Status contains the VSAM return and feedback codes. It is a 2-byte field with the first containing the hexadecimal return code and the second containing the hexadecimal feedback code. Refer to the appropriate VSAM publication for a description of VSAM return and reason codes.

**System Action:** If dual BSDSs are available, the log manager attempts to read from the other BSDS. If read from the second BSDS fails or if there is only one BSDS, an error code is returned to the log request that caused access to the BSDS.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If dual BSDS mode is being used, execute an offline access method services job to
rename the error BSDS and define a new BSDS with the same name. Then enter the log manager -RECOVER BSDS command to reestablish dual BSDS mode.

If dual BSDS mode is not being used, the DB2 subsystem must be shut down, and the BSDS must be recovered from a backup copy. To recover the BSDS, use the change log inventory (DSNJU003) utility.

If dual BSDS mode is not being used, the DB2 subsystem must be shut down and the BSDS recovered offline. In this case, execute the same access method services job mentioned above to rename the full BSDS and define a larger BSDS with the same name. Enter the DB2 -RECOVER BSDS command to reestablish dual BSDS mode.

If dual BSDS mode is not being used, the DB2 subsystem must be shut down and the BSDS recovered offline. In this case, execute the same access method services job mentioned above to rename the full BSDS and define a larger BSDS. Next, execute an access method services REPRO job to copy the full BSDS into the new BSDS.

**DSNJ110I OUT OF SPACE IN BSDS DSNAME=...**

**Explanation:** There is no more space in the specified bootstrap data set. The operation that encountered the out-of-space condition did not complete properly.

**System Action:** If dual BSDSs are available, the log manager enters single BSDS mode using the remaining good BSDS. Otherwise, an error code is returned to the log request that caused access to the BSDS.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If dual BSDS mode is being used, execute an offline access method services job to rename the full BSDS and define a new, larger BSDS with the same name. Enter the DB2 -RECOVER BSDS command to reestablish dual BSDS mode.

**DSNJ109I OUT OF SPACE IN BSDS DSNAME=...**

**Explanation:** This message is issued when the last available active log data set is 5% full, and is reissued after each additional 5% of the data set space is filled.

**System Action:** Each time the message is issued, the off-load processing is retried. If the situation is not corrected, the active log data space fills to capacity, message DSNJ110E is issued, and the DB2 online processing halts.

**Operator Response:** To clear this condition, steps must be taken to complete other waiting off-load tasks. Once an active log data set is made available (reusable) by completing the off-load process for it, the DB2 logging activity can continue.

**System Programmer Response:** To clear this condition, steps must be taken to complete other waiting off-load tasks. Once an active log data set is made available (reusable) by completing the off-load process for it, the DB2 logging activity can continue.

**DSNJ111E OUT OF SPACE IN ACTIVE LOG DATA SETS**

**Explanation:** Due to delays in off-load processing, all available space in all active log data sets has been exhausted. DB2 recovery logging cannot continue.

**System Action:** The DB2 log manager waits for an available data set.

**Operator Response:** Execute an MVS Display System Requests command (D R,L for example) to determine if there are no outstanding requests that are related to the log off-load process. Take the necessary action to satisfy any requests, and permit off-load to continue.

**System Programmer Response:** If the delay was caused by the lack of a resource required for off-load, the necessary resource must be made available to allow off-load to complete and thus permit logging to proceed. For additional information on recovery from this condition, refer to the discussion on DB2 system resource failures and active log failures in Section 4 (Volume 1) of DB2 Administration Guide.

**DSNJ112E csect-name INSUFFICIENT ACTIVE LOG DATA SETS DEFINED IN BSDS**

**Explanation:** There are not enough active log data sets defined in the BSDS to start DB2. This condition usually exists for one of the following reasons.

* Fewer than two data sets are defined for one of the active log copy sets.
* DSN6LOGP specified TWOACTV=YES in DB2 initialization parameters, but data sets for two copies of active log are not defined in BSDS.
* Fewer than two data sets are available (not flagged as STOPPED) for one of the active log copy sets.

**System Action:** DB2 startup is terminated.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Use the change log inventory (DSNJU003) utility to make the number of active log data sets defined in the BSDS consistent with the parameters specified on DSN6LOGP. Log data sets that are flagged as ‘STOPPED’ will not be reused by DB2. These data sets must be recovered (either redefined or recovered from the other copy of the log) and the log data sets must be deleted and re-added to the BSDS (using DSNJU003) with the appropriate RBA’s, to clear the STOPPED status. Restart DB2.
**Explanation:** A request was made to read the log starting at this log-value and log-type (RBA or LRSN). However, the log value cannot be found in any active or archive log data set for the indicated member. The member-id contains the ID of the data sharing member whose logs were being requested at the time of the failure or zero if data sharing is not active. The connection and correlation IDs identify the user or application that encountered the problem. Correlation IDs beginning with ‘0nn’ where ‘nn’ is a number from 01 to 28, identify system agents. Refer to Section 4 (Volume 1) of DB2 Administration Guide for information about recovery from log failures.

**System Action:** Depending upon what log record is being read and why, this may result in an abend with a reason code of ‘0D1032A’.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Probable user error. Most likely, the archive log data set that contained the requested log value has been deleted from the bootstrap data set (BSDS) by the change log inventory (DSNJU003) utility. Locate the output from an old print log map run of the BSDS for the DB2 member identified by member-id, and identify the data set that contains the missing log-value. If the data set has not been reused, run the DSNJU003 utility to add this data set back into the inventory of log data sets. Restart DB2.

**Explanation:** An error occurred while accessing one of the archive data sets being created by off-load. Because the dual archive option is specified, off-load is continuing with the other archive data set. For the RBA range being off-loaded, there is only one copy of archive instead of the usual two copies.

**System Action:** Off-load produces a single archive data set.

**System Programmer Response:** A second copy of this archive log data set can be made, and the BSDS(s) can be updated with the change log inventory (DSNJU003) utility.

**Explanation:** Off-load could not allocate an archive log data set. The off-load was not performed. This message is usually preceded by message DSNJ103I.

**System Action:** Off-load will be retried at a later time.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Review the error status information of message DSNJ103I. Correct the condition that caused the data set allocation to fail so that, on retry, the off-load can take place.

**Explanation:** Off-load could not add an archive entry to the BSDS. The off-load is considered incomplete. The active log data set is not marked as reusable for new log data. This message is preceded by message DSNJ107I, DSNJ108I, or DSNJ109I.

**System Action:** Off-load will be retried at a later time.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Refer to the specific preceding message for action.

**Explanation:** The log manager encountered an error during initialization reading from the specified bootstrap data set. Error status contains the VSAM return and feedback codes. It is a two byte field with the first containing the hexadecimal return code and the second byte containing the hexadecimal feedback code. Refer to the appropriate VSAM publication for a description of VSAM return and reason codes.

**System Action:** DB2 startup is terminated.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Determine the cause of the read error using the VSAM error status information provided. Restart DB2.

**Explanation:** Log manager initialization received a bad return code from the named macro.

**System Action:** DB2 initialization is terminated.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Determine the problem from the documentation on the named macro and return code. Then take appropriate steps, and restart the DB2 subsystem.

**Explanation:** During log manager initialization, the bootstrap data set access function was unable to complete its initialization process. Refer to Section 4 (Volume 1) of DB2 Administration Guide for information about recovery from BSDS or log failures.

**System Action:** DB2 startup is terminated.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** One or more error messages describing the specific error have preceded this message. Refer to the specific message(s) for error analysis and the appropriate action to take.
**DSNJ120I**  DUAL BSDS DATA SETS HAVE UNEQUAL TIMEStAMPS, BSDS1 SYSTEM=..., UTILITY=..., BSDS2 SYSTEM=..., UTILITY=...

**Explanation:** When the log manager was initialized, the time stamps of the dual bootstrap data sets (BSDS) did not agree. The time stamps from the system and from the change log inventory (DSNJU003) utility are shown for each BSDS. The time stamps have the format yy.dddd hh:mm:ss.th.

**System Action:** DB2 startup is terminated.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Run the print log map (DSNJU004) utility against each BSDS. From the output, determine which data set is obsolete, delete it, define a replacement for it, and copy the remaining BSDS to the replacement.

**Example:** If output from the print log map (DSNJU004) utility for both data sets is similar, delete the data set with the oldest time stamp, and copy the data set with the most recent time stamp.

**DSNJ121I**  LOG MANAGER ENCOUNTURED AN ERROR READING THE JF CB. DDNAME=nnnnnnnn

**Explanation:** During log manager initialization (if dual BSDS data sets are specified), the job file control block (JFCB) in MVS is read to obtain the data set names associated with DDNAME BSDS1 and BSDS2. This error is caused by a missing DD statement.

**System Action:** DB2 is terminated.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Ensure that a DD statement exists in the DB2 startup procedure for DDNAME BSDS1. If dual BSDS data sets are used, ensure that a DD statement also exists in the DB2 startup procedure for DDNAME BSDS2.

**DSNJ122I**  DUAL BSDS DATA SETS ARE OUT OF SYN-CHRONIZATION

**Explanation:** During log manager initialization, the dual BSDS data sets were found to differ in content.

**System Action:** DB2 startup is terminated.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Run the print log map (DSNJU004) utility against each BSDS to determine which data set was last used as copy 1. Delete the copy 2 data set, define a replacement for the deleted data set, and copy the remaining BSDS to the replacement.

**DSNJ123I**  CHANGE LOG INVENTORY FAILURE DETECTED

**Explanation:** During log manager initialization, the BSDS data set was found to have been incompletely processed by the change log inventory (DSNJU003) utility.

**System Action:** DB2 startup is terminated.

**System Programmer Response:** Run the print log map (DSNJU004) utility to determine what operation against the BSDS did not complete. Run the change log inventory (DSNJU003) utility against the BSDS(s) to allow any unfinished processing to be completed.

**DSNJ124I**  OFFLOAD OF ACTIVE LOG SUSPENDED FROM RBA xxxxxx TO RBA xxxxxx DUE TO I/O ERROR

**Explanation:** During off-load, an unrecoverable I/O error was encountered on an active log data set. The data set experiencing the error is marked unusable, and no further logging is done to that data set.

**System Action:** Active log data sets continue to be off-loaded as they become full.

**Operator Response:** Notify the system programmer to allow recovery actions to be initiated.

**System Programmer Response:** Recover the data manually from the data set, copy it to an archive data set, run the change log inventory (DSNJU003) utility to make the new archive data set available to the DB2, and remove the error-prone active log data set from DB2 by using the change log inventory utility.

**DSNJ125I**  ERROR DUMPING BSDS, OFFLOAD CONTINUING WITHOUT PRODUCING THE BSDS DUMP

**Explanation:** An error occurred while dumping the BS_DS data set during the off-load process. The data set is not produced, but the off-load process continues. The volume containing the off-loaded data set does not contain a BSDS for recovery use.

**System Action:** The system continues the off-load process without producing a dump of the bootstrap data set.

**DSNJ126I**  BSDS ERROR FORCED SINGLE BSDS MODE

**Explanation:** The log manager encountered an I/O error or a VSAM logical error on a bootstrap data set. This message is preceded by message DSNJ107I or DSNJ108I.

**System Action:** The log manager enters single BSDS mode using the remaining BSDS.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Execute an offline access method services job to rename the error BSDS and define a new BSDS with the same name. Then enter the log manager -RECOVER BS_DS command to reestablish dual BSDS mode.

**DSNJ127I**  SYSTEM TIMESTAMP FOR BSDS=...

**Explanation:** When the log manager is initialized, the system time stamp for the bootstrap data sets (BSDS) is displayed. The time stamp is of the format yy.dddd hh:mm:ss.th. This time stamp should be close to the last time at which this subsystem was stopped. If not, then it may indicate a restart is being attempted with the wrong BSDS.

**System Action:** DB2 startup continues.

**Operator Response:** If the time displayed does not appear to be close to the time this subsystem was last stopped, contact the system programmer.

**System Programmer Response:** If you cannot explain the apparent time discrepancy, cancel the subsystem. From the startup procedure for the subsystem services address space, determine the data set names of the bootstrap data sets and run the print log map (DSNJU004) utility. Check whether the active and archive log data sets all belong to this subsystem. If
not, then change the startup procedure for the subsystem services address space to use the correct bootstrap data sets.

**DSNJ128I** LOG OFF-LOAD TASK FAILED FOR ACTIVE LOG nnnnnn

**Explanation:** The off-load task abended while attempting to offload the relative byte address (RBA) range in active log data set 'nnnnnn'.

**System Action:** The off-load task terminates and the archive data sets allocated to the off-load task are deallocated and deleted. The status of the active log data sets involved in the failed off-load processing remains set to 'not reusable'.

The log off-load task will be reinitiated by one of several events. The most common are:

- All the available space in the current active log data set has been used (normal case).
- A DSNJ110E message is issued.
- The master address space is started, but data in the active log has not been archived.
- An I/O error occurs on the active log, which will force the system to truncate and off-load the active log data set, and switch to a new active log data set.

**Operator Response:** This message is the result of an off-load failure, and will be preceded by one or more DB2 messages (for example, DSNJ073I) and/or MVS ABEND messages (for example, IEC030I, IEC031I, IEC032I). If DB2 is operating with restricted active log resources (see message DSNJ110E), quiesce the system to restrict logging activity until the ABEND or the DSNJ110E condition can be resolved. Notify the system programmer.

**System Programmer Response:** This message is the result of an off-load failure, and will be preceded by one or more DB2 messages (for example, DSNJ073I) and/or MVS ABEND messages (for example, IEC030I, IEC031I, IEC032I). If DB2 is operating with restricted active log resources (see message DSNJ110E), quiesce the system to restrict logging activity until the ABEND or the DSNJ110E condition can be resolved. Notify the system programmer.

**Problem Determination:** This message is the result of an off-load failure, and will be preceded by one or more DB2 messages and/or MVS ABEND messages. See the documentation for the associated DB2 and/or MVS messages to formulate a course of corrective action. Use the print log map (DSNJU004) utility to print the BSDS (both copies if running in dual mode), and then use the DSNJU003 output to determine the current status of the active and archive log data sets.

This message can be generated for a variety of reasons. However, the most likely are:

- Archive log data set allocation errors. Refer to the text for messages DSNJ103I for corrective action.
- The size of the archive log data set is too small to contain the active log data set(s) during off-load processing. All secondary space allocations have been used. This condition is normally accompanied by MVS ABEND message IEC030I.
- All available space on the DASD volume(s) to which the archive address set is being written has been exhausted. This condition is normally accompanied by MVS ABEND message IEC032I.
- The primary space allocation for the archive log data set (as specified in ZPARMs) is too large to allocate to any available online DASD device. This condition is normally accompanied by MVS ABEND message IEC032I.

**DSNJ129I** END OF log-rba eol-rba X COULD NOT BE FOUND IN ANY ACTIVE LOG DATA SET HIGHEST RBA FOUND WAS hi-rba X

**Explanation:** The log manager has been requested to find 'eol-rba', the log record which has been recorded in the bootstrap data set (BSDS) as the highest RBA written. This RBA cannot be found in any active log data set. The highest RBA which could be found in any active data set was 'hi-rba'.

**System Action:** DB2 startup processing is terminated.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Most likely, the active log data set containing the requested RBA has been deleted from the BSDS by the change log inventory (DSNJU003) utility. If the data set has not been reused, run DSNJU003 to add this data set back into the BSDS. Restart DB2.

If the data set is not available, a conditional restart must be performed to either truncate the log prior to the RBA value of the missing data set, or to cold start at a higher RBA value. Refer to Section 4 (Volume 1) of DB2 Administration Guide for more information.

**DSNJ130I** ICF CATALOG NAME IN BSDS DOES NOT AGREE WITH DSNZPARM. BSDS CATALOG NAME=name, DSNZPARM CATALOG NAME=name

**Explanation:** The ICF catalog name defined in DSNZPARM does not agree with the name contained in the bootstrap data set (BSDS).

**System Action:** DB2 startup is abended.

**User Response:** Notify the system programmer.

**Operator Response:** If you attempt to start the DB2 subsystem, you will receive this same message and abnormal termination will result until the problem is resolved.

**System Programmer Response:** Change the ICF catalog name in the BSDS to agree with the name defined in DSNZPARM during DB2 initialization. To change the ICF catalog name in the BSDS, use the BSDS change log inventory (DSNJU003) utility with the NEWCAT control statement.

**Problem Determination:** During log manager initialization, the ICF catalog name defined in DSNZPARM is compared to the catalog name in the BSDS to ensure that the catalog name used by the log manager during DB2 processing is correct. These names were found not to be the same.

**DSNJ139I** LOG OFFLOAD TASK ENDED

**Explanation:** Processing of the active log off-load ended.

**System Action:** This message is written to the MVS console.

**Operator Response:** This message does not guarantee that the off-load completed without errors. Check the console log and task messages to review the execution of the off-load task to determine whether any abnormal events occurred during the off-load.
**DSNJ151I**  csect-name INVALID BSDS RELEASE LEVEL
ACTIVE=xxxxxx ARCHIVE=yyyyyy DSN=zzzzzz

**Explanation:** At initialization time DB2 detected that the BSDS log records are not at the proper release level for this release of DB2. 'xxxxxx' contains the release level for the ACTIVE log records and 'yyyyyy' contains the release level for the ARCHIVE log records. 'zzzzzz' contains the data set name for the BSDS encountering the error.

**System Action:** DB2 startup will be terminated.

**Operator Response:** Notify the system programmer so operating procedures can be changed.

**System Programmer Response:** Run the appropriate conversion program (DSNJMIG0 or DSNJFAL0) to convert the BSDS data set to a compatible release level.

**DSNJ150E** LOG CAPTURE EXIT ABEND, EXIT DEACTIVATED

**Explanation:** An abnormal program interrupt was detected while executing in the installation-supplied log capture exit code (i.e. entry point DSNJW117 in load module DSNJL004).

As a result of the abend, the log capture exit will no longer be active; log data will no longer be available for Exit capture/process.

This message can only occur when an installation-supplied log capture exit (entry DSNJW117) is active for this instance of DB2.

**System Action:** The log capture exit (entry point DSNJW117) is terminated. No further calls will be attempted for this DB2 instance. A full dump is provided for diagnostic purposes.

**User Response:** See “System Programmer Response” below.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Determine the cause of the DSNJL004 load module (DSNJW117 entry point) abend and take corrective action.

**Note:** A correctly-functioning copy of load module DSNJL004 (entry DSNJW117) must be available in order to start DB2. If the problem which caused the above abend cannot be corrected, ensure that the default DSNJW117 entry (load module DSNJL004 - supplied with the DB2 release) is available during the next DB2 subsystem start.

**DSNJ151I**  csect-name IN READING log-type log-value, A NONZERO REASON CODE WAS RETURNED.
CONNECTION-ID=xxxx CORRELATION-ID=yyyyyy REASON-CODE=ccc MEMBER-ID=member-id

**Explanation:** DB2 could not successfully complete the read of this 'log-value' and 'log-type' (RBA or LRSN) due to reason code 'ccc'. The member-id contains the ID of the data sharing member whose logs were being requested at the time of the failure or zero if data sharing is not active. The user or application that encountered the error is identified by the connection and correlation ID. Messages that have the same connection ID and correlation ID relate to the same application. Correlation IDs beginning with '0nnn', where 'nn' is a number from 01 to 28, identify system agents.

**System Action:** DB2 attempts to recover from the error.

**System Programmer Response:** If DB2 was able to recover from the error and successfully complete the application, no further action is required. If the application abnormally terminated or DB2 could not recover successfully, this message is followed by one or more messages. Refer to the information in this message and the subsequent messages to determine the appropriate corrective action. For information about recovery from log failures, refer to Section 4 (Volume 1) of DB2 Administration Guide.

**DSNJ152I**  csect-name ERROR ENCOUNTERED WHEN ATTEMPTING TO BUILD ARCHIVE LOG VOLUME LIST. CONNECTION-ID=xxxx, CORRELATION-ID=yyyyyy REASON-CODE=ccc

**Explanation:** An error occurred while attempting to create the Archive Log Volumes report. An RBA range could not be successfully mapped into one or more archive data sets due to reason code 'ccc'. The user or application that encountered the error is identified by the connection and correlation ID. This message might be preceded by one or more related error messages. Messages that have the same connection ID and correlation ID relate to the same user. Correlation IDs beginning with '0nnn', where 'nn' is a number from 01 to 28, identify system agents.

This failure could be caused by one or more missing archive log data sets, or a system error (for example, an I/O error reading BSDS).

The Archive Log Volumes report (see message DSNJ330) is not produced. In addition, no premounting of tapes is possible.

**System Action:** The user or application continues execution. The physical read process for the user or application continues until the job completes normally or terminates abnormally. The job can terminate abnormally if the error is encountered again when the data set is physically required for the read process.

**System Programmer Response:** If the user or application completes successfully, no further action is necessary. If the user or application does not complete successfully, refer to the messages related to the actual failure to determine the appropriate corrective actions. For information about recovery from log failures, refer to Section 4 (Volume 1) of DB2 Administration Guide.

**DSNJ200I**  csect-name xxxxxxxx UTILITY PROCESSING COMPLETED SUCCESSFULLY

**Explanation:** The control section 'csect-name' successfully completed the 'xxxxxxx' utility.

**System Action:** DB2 writes this message to the SYSPRINT data set, not to a console.

**DSNJ201I**  csect-name xxxxxxxx UTILITY PROCESSING WAS UNSUCCESSFUL

**Explanation:** The control section 'csect-name' was unable to successfully complete processing of 'xxxxxxx' utility.

**System Action:** The current utility is terminated. DB2 writes this message to the SYSPRINT data set, not to a console.

**User Response:** Review other messages produced by the utility to determine the appropriate action to be taken.
DSNJ202I  csect-name INSUFFICIENT VIRTUAL STORAGE AVAILABLE TO CONTINUE WITH UTILITY
Explanation: A GETMAIN macro instruction has failed, because virtual storage is unavailable for the job-step.
System Action: The current utility is terminated. This message is written to the SYSPRINT data set, not to a console.
User Response: Rerun the utility after providing a larger virtual storage allocation for the job-step.

DSNJ203I  xxxxxxxx OPERATION IS INVALID
Explanation: The user entered a utility control statement operation of ‘xxxxxxx’ that is invalid.
System Action: The current utility is terminated. This message is written to the SYSPRINT data set, not to a console.
User Response: Correct the control statement, and rerun the utility.

DSNJ204I  xxxxxxxx PARAMETER IS INVALID
Explanation: The user specified a utility control statement parameter of ‘xxxxxxx’ that is invalid.
System Action: The current utility is terminated. This message is written to the SYSPRINT data set, not to a console.
User Response: Correct the control statement, and rerun the utility.

DSNJ205I  xxxxxxxx PARAMETER HAS NO ARGUMENT
Explanation: ‘xxxxxxx’ contains the name of a parameter that requires an argument.
System Action: The current utility is terminated. This message is written to the SYSPRINT data set, not to a console.
User Response: Specify an argument for the identified parameter and then rerun the utility.

DSNJ206I  xxxxxxxx PARAMETER REQUIRES NO ARGUMENT
Explanation: ‘xxxxxxx’ contains the name of the parameter that has been incorrectly followed by an = symbol.
System Action: The current utility is terminated. This message is written to the SYSPRINT data set, not to a console.
User Response: Correct the control statement, and rerun the utility.

DSNJ207I  csect-name PARAMETERS INCONSISTENT WITH SPECIFIED OPERATION
Explanation: The user has specified utility control statement parameters that are inconsistent with the specified utility operation.
System Action: The current utility is terminated. This message is written to the SYSPRINT data set, not to a console.

User Response: Correct the control statement, and rerun the utility.

DSNJ208E  csect name MEMBER member name WAS NOT FOUND IN THE BSDS SPECIFIED IN THE GROUP DD STATEMENT.
Explanation: You are running the print log map (DSNU004) utility. No member record exists for this member in the boot-strap data set (BSDS) specified in the GROUP DD statement.
System Action: The log map for this member is not printed. If the records for other members are requested and are found in the BSDS specified in the GROUP DD statement, they are printed.
User Response: Use the DISPLAY GROUP command to verify that the member name is a valid name and that the member has successfully joined the group. Also verify that the BSDS specified in the GROUP DD statement is correct. If the member name and the BSDS name are correct, then the most likely causes of this message are:
• The ‘missing member’ never joined the group because it was never started.
• The member whose BSDS you specified in the GROUP DD statement was down when the missing member joined the group and has not been restarted.

To gather the information from the missing member, you can rerun the utility, using the BSDS DDNAME option to point to the missing member’s BSDS. To avoid this problem in the future, make sure the BSDS named in the GROUP statement is from a recently started member.

DSNJ209I  ENDRBA VALUE MUST BE GREATER THAN STARTRBA VALUE
Explanation: The ‘STARTRBA’ and ‘ENDRBA’ parameters specify an RBA range. Hence, the ENDRBA value must be greater than the STARTRBA value.
System Action: The current utility is terminated. This message is written to the SYSPRINT data set, not to a console.
User Response: Correct the control statement, and rerun the utility.

DSNJ210I  OLD ICF CATALOG NAME=oldname, NEW CATALOG NAME=newname
Explanation: Change log inventory (DSNU003) utility processing for the NEWCAT control statement has completed successfully.
oldname Either:
• The name of the prior ICF catalog or
• ‘NULL’ if no prior name existed.
newname The name of the ICF catalog defined by the VSAMCAT keyword.
**DSNJ211I**  
**UNEXPECTED END OF DATA ON SYSIN DATA SET**

**Explanation:** Additional control statements were expected but could not be found.

**System Action:** The current utility is terminated. This message is written to the SYSPRINT data set, not to a console.

**User Response:** Correct the control statement(s), and rerun the utility.

**DSNJ212I**  
**csect-name ERROR RETURNED FROM BSDS READ, RPLERRCD=yy, DDNAME=xxxxxxxx**

**Explanation:** A VSAM GET was issued that resulted in a nonzero return code. 'yy' contains the error code returned by VSAM. 'xxxxxxxx' contains the ddname of the BSDS encountering the error.

**System Action:** The current utility is terminated. This message is written to the SYSPRINT data set, not to a console.

**User Response:** The action taken is dictated by the return code. The BSDS may have to be recovered by use of a backup copy.

**DSNJ213I**  
**csect-name ERROR RETURNED FROM BSDS WRITE, RPLERRCD=yy, DDNAME=xxxxxxxx**

**Explanation:** A VSAM PUT was issued that resulted in a nonzero return code. 'yy' contains the error code returned by VSAM. 'xxxxxxxx' contains the ddname of the BSDS encountering the error.

**System Action:** The current utility is terminated. This message is written to the SYSPRINT data set, not to a console.

**User Response:** The action to be taken is dictated by the return code. The BSDS may have to be recovered by use of a backup copy.

**DSNJ214I**  
**SPECIFIED DSNAME ALREADY EXISTS IN BSDS, DDNAME=xxxxxxxx**

**Explanation:** The user attempted a NEWLOG operation with a data set name that already exists in the BSDS. An entry is never made in a BSDS if the specified DSNAME currently exists in either the active or archive records of that BSDS. 'xxxxxxxx' contains the ddname of the subject BSDS.

**System Action:** The current utility is terminated. This message is written to the SYSPRINT data set, not to a console.

**User Response:** Either correct the control statement and rerun the utility, or delete the existing DSNAME from the BSDS and rerun the utility.

**DSNJ215I**  
**csect-name SVC 99 INFORMATION REQUEST FOR DD NAME 'ddname' FAILED. RC=rc, RSN=rsn, AND INFO CODE infocode.**

**Explanation:** The Print Log Map utility requested information from the MVS Dynamic Allocation facility about the DD name shown in the message, but the system was unable to provide the information. The return code, reason code, and information code were returned by the system’s SVC 99 facility. See MVS/ESA Programming: Authorized Assembler Services Guide for an explanation of these codes.

**System Action:** If the information request was for the SYSIN DD statement, the Print Log Map utility assumes the control statement was not provided and attempts to continue the request using the SYSUT1 DD statement to locate the BSDS to be mapped.

If the information request was for the DD name of a BSDS, attempts to get information about BSDS data sets is terminated. If information about any BSDS data sets was previously acquired, the maps of those BSDS data sets are printed. Otherwise, the utility terminates.

**System Programmer Response:** Use the MVS manual (or the equivalent manual for the level of MVS on your system) to help you in problem determination.

**Problem Determination:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 4, 32.

**DSNJ216I**  
**BSDS ACTIVE LOG DATA SET RECORD IS FULL, DDNAME=xxxxxxxx**

**Explanation:** The maximum number of active log data sets is fixed. No further entries can be inserted after the maximum has been reached. 'xxxxxxxx' contains the ddname of the subject BSDS.

**System Action:** The current utility is terminated. This message is written to the SYSPRINT data set, not to a console.

**User Response:** Run the print log map utility to determine the current status of the BSDS. Subsequent actions can then be formulated, depending upon the status of the BSDS.

**DSNJ217I**  
**SPECIFIED DSNAME DOES NOT EXIST IN BSDS, DDNAME=xxxxxxxx**

**Explanation:** The DELETE operation specifies a DSNAME that cannot be found in the BSDS. 'xxxxxxxx' contains the ddname of the subject BSDS.

**System Action:** The current utility is terminated. This message is written to the SYSPRINT data set, not to a console.

**User Response:** Correct the control statement, and rerun the utility.
**Explanation:** The DELETE operation specifies a COPY1VOL or COPY2VOL argument that cannot be found in the BSDS. ‘xxxxxxx’ contains the ddname of the subject BSDS.

**System Action:** The current utility is terminated. This message is written to the SYSPRINT data set, not to a console.

**User Response:** Correct the control statement, and rerun the utility.

---

**Explanation:** An error occurred when the CSECT ‘csect-name’ tried to open a data set named ‘xxxxxxx’.

This error can be caused by a number of different conditions. The most probable conditions are:

1. The ddname of the SYSPRINT, SYSIN, or SYSUT1 data set was not specified in the user’s job control language (JCL).
2. The DB2 subsystem is currently executing.
3. The bootstrap data set (BSDS) was allocated by another job with a disposition (DISP) that conflicts with the DISP specified in the user's JCL.
4. The data set associated with ‘xxxxxxx’ is already open, possibly due to an earlier system abend.
5. The user is not authorized to access the data set associated with ‘xxxxxxx’.
6. Insufficient virtual storage is available to perform the OPEN command.
7. The catalog indicates that the data set associated with ‘xxxxxxx’ has an invalid physical record size.

**System Action:** The current utility is terminated.

DB2 writes this message to the SYSPRINT data set, not to a console.

**User Response:** The user's action depends on the condition that caused the OPEN error. The following is a list of appropriate actions corresponding to the conditions listed in the explanation:

1. Provide the missing DD statements, and then rerun the utility. Refer to DB2 Utility Guide and Reference for details about the required DD statements.
2. Wait until the DB2 subsystem is inactive before running the utility again because the log utility cannot execute while the DB2 subsystem is active.
3. Correct the disposition conflict and then rerun the utility.
4. Submit an access method services (IDCAMS) VERIFY job against the data set associated with ‘xxxxxxx’. Rerun the log utility job.
5. In the case of an authorization failure, a separate message is usually generated from the authorization facility (RACF, for example). Investigate the authorization messages and obtain the proper authorization before running the utility again.
6. Insufficient virtual storage is usually accompanied by a separate error from the MVS operating system. Increase the REGION size on the JCL job step and rerun the utility.
7. Contact the system programmer.

---

**Explanation:** The print log map utility found the BSDS to be in create mode, so it cannot contain data to map. ‘xxxxxxx’ contains the ddname of the data set.

**System Action:** The current utility is terminated. This message is written to the SYSPRINT data set, not to a console.

**User Response:** Correct the JCL so that a nonnull data set can be processed.

---

**Explanation:** DB2 encountered errors while processing a utility. These errors subsequently caused ‘xxxxxxx’ to be bypassed.

This message is a warning only and is displayed after messages that specify the error or errors that caused the utility operation to abend. Note that the error or errors may not be associated with the current ‘xxxxxxx’ operation; rather, under log utility processing, a significant error in any operation causes the control statements for this and any subsequent operations to be checked for syntax only. BSDS updates do not occur for any operation specified in this message.

**System Action:** The log utility continues to process. However, for this and all subsequent operations, the bootstrap data set (BSDS) is not updated and the utility only checks the syntax of the control statements.

DB2 writes this message to the SYSPRINT data set, not to a console.

**User Response:** Consult the previous messages and correct any errors that caused this message to be generated. Resubmit the log utility job for all operations that have been bypassed.

---

**Explanation:** You specified the parameter ‘xxxx’. This parameter is not valid for the argument.

**System Action:** The current utility is terminated. This message is written to the SYSPRINT data set, not to a console.

**User Response:** Correct the parameter argument on the control statement, and rerun the utility.

---

**Explanation:** The argument value of the parameter named ‘xxxx’ exceeds the maximum length allowed.

**System Action:** The current utility is terminated. This message is written to the SYSPRINT data set, not to a console.

**User Response:** Correct the parameter argument on the control statement, and rerun the utility.
**DSNJ224I**  xxxx PARAMETER APPEARS TOO OFTEN

**Explanation:** The parameter named 'xxxx' was specified more than once on the same control statement.

**System Action:** The current utility is terminated. This message is written to the SYSPRINT data set, not to a console.

**User Response:** Remove the redundant parameter, and rerun the utility.

---

**DSNJ225I**  xxxx OPERATION SUCCESSFULLY COMPLETED

**Explanation:** The change log inventory (DSNU003) utility operation named 'xxxx' completed successfully.

**System Action:** This message is written to the SYSPRINT data set, not to a console.

---

**DSNJ226I**  SPECIFIED VOLUME ALREADY EXISTS IN BSDS, DDNAME=xxxxxxx

**Explanation:** The specified volume currently exists in the archive log records of the BSDS. 'xxxxxxx' specifies the ddname of the subject BSDS.

**System Action:** This message is written to the SYSPRINT data set, not to a console.

**User Response:** Either correct the parameter argument on the control statement, or delete the specified volume and rerun the utility.

---

**DSNJ227I**  NO SPACE AVAILABLE IN BSDS FOR ADDITIONAL ARCHIVE VOLUME ENTRIES, DDNAME=xxxxxxx

**Explanation:** The maximum number of archive volumes has been exceeded, and no more space is available for volume entries in the copy specified.

**System Action:** The current utility is terminated.

**User Response:** Delete some of the archive entries in the specified copy number, and rerun the utility.

---

**DSNJ228I**  csect-name LOG DEALLOCATION ERROR

**DSNAME=dsname, ERROR STATUS=eeeeeiii, SMS REASON CODE=ssssssss

**Explanation:** The log manager encountered an error while trying to dynamically deallocate the data set. Error status is the error reason code returned by MVS dynamic allocation.

**System Action:** Log manager processing continues.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** The error status portion of this message contains the 2-byte error code (S99ERROR) followed by the 2-byte information code (S99INFO) from the SVC request block. If the S99ERROR code indicates an SMS deallocation error (97XX), then 'ssssssss' contains additional SMS reason code information obtained from S99ERSN. Refer to the MVS/ESA SPL: Application Development Guide for a description of these codes.

---

**DSNJ229I**  csect-name OPEN FAILED FOR SYSIN

**Explanation:** An error occurred when the DB2 Print Log Map utility tried to open the SYSIN data set.

**Possible causes are:**

1. The DD name of the SYSIN data set was not specified in the user's job control language (JCL).
2. Insufficient virtual storage is available to perform the OPEN command.
3. The characteristics of the SYSIN data set are different from those expected by the print log map (DSNU004) utility.

**System Action:** DSNU004 attempts to continue processing without an input control statement. DB2 writes this message to the SYSPRINT data set, not to the system console.

**User Response:** Take one of the following actions based on the cause of the error.

1. Provide the missing DD statement and rerun the utility. Refer to DB2 Utility Guide and Reference for details about the required DD statements.
2. Insufficient virtual storage is usually accompanied by a separate error message from the MVS operating system. Increase the REGION size on the JCL job step and rerun the utility.
3. Check that the SYSIN data set is a fixed record format (blocked or unblocked) with an LRECL of 80. You might need to contact the system programmer for help if this is a JES data set.

---

**DSNJ230I**  LOG OFFLOAD SUBCOMPONENT INITIALIZATION PROCESSING FAILED

**Explanation:** During log manager initialization, the off-load function was unable to complete its initialization process.

**System Action:** DB2 startup is terminated.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** One or more error messages describing the specific error preceded this message. Refer to the specific message(s) for error analysis and the appropriate actions to take.

---

**DSNJ231I**  LOG COMMAND INITIALIZATION PROCESSING FAILED

**Explanation:** During log manager initialization, the log command function was unable to complete its initialization process.

**System Action:** DB2 startup is terminated.

**Operator Response:** The rest of subsystem termination will direct the actions you should take.

**System Programmer Response:** One or more error messages describing the specific error preceded this message. Refer to the specific message(s) for error analysis and the appropriate action to take.

This message will be of interest to the IBM support center when the problem is described.
**DSNJ232I**  OUTPUT DATA SET CONTROL INITIALIZATION PROCESSING FAILED

**Explanation:** During log manager initialization, the output data set control function was unable to complete its initialization process.

**System Action:** DB2 startup is terminated.

**System Programmer Response:** One or more error messages describing the specific error preceded this message. Refer to the specific message for error analysis and the appropriate action to take.

This message will be of interest to the IBM support center when the problem is described.

**Notify the system programmer.**

**Problem Determination:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B:

- Problem determination on page 1051

**DSNJ233I**  ARCHIVE LOG READ INITIALIZATION PROCESSING FAILED

**Explanation:** During log manager initialization, the archive log read function was unable to complete its initialization process.

**System Action:** DB2 startup is terminated.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** One or more error messages describing the specific error preceded this message. Refer to the specific message(s) for error analysis and the appropriate action to take.

**DSNJ234I**  ARCHIVE LOG COMMAND QUIESCE INITIALIZATION PROCESSING FAILED

**Explanation:** During log manager initialization, the quiesce function which supports the -ARCHIVE LOG MODE (QUIESCE) command processing was unable to complete its initialization process.

**System Action:** DB2 startup is terminated.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** One or more error messages describing the specific error preceded this message. Refer to the specific message(s) for error analysis and the appropriate action to take.

**DSNJ235I**  OUTPUT BUFFER WRITER INITIALIZATION PROCESSING FAILED

**Explanation:** During log manager initialization, the output buffer writer function was unable to complete its initialization process.

**System Action:** DB2 startup is terminated.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** One or more error messages describing the specific error preceded this message. Refer to the specific message(s) for error analysis and the appropriate action to take.

**DSNJ236I**  BOOTSTRAP ACCESS TERMINATION PROCESSING FAILED

**Explanation:** During log manager termination, the bootstrap data set access function was unable to complete its termination process.

**System Action:** Log manager shutdown continues to the next step.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** One or more error messages describing the specific error preceded this message. Refer to the specific message(s) for error analysis and the appropriate action to take.

**DSNJ237I**  csect-name INVALID CONTROL STATEMENT. THE FIRST WORD MUST BE 'MEMBER'.

**Explanation:** The print log map (DSNJU004) utility read an invalid control statement from the SYSIN data set.

**System Action:** DSNJU004 ignores the control statement and attempts to continue processing by looking for a SYSUT1 DD statement to describe the BSDS that is to be printed.

**User Response:** Refer to DB2 Utility Guide and Reference for information on creating a print log map (DSNJU004) utility control statement. Correct or remove the control statement and rerun the job.

**System Programmer Response:** Notify the system programmer.

**Problem Determination:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Collect the following diagnostic items listed in Appendix B: Problem determination on page 1051.**

**DSNJ238I**  LOG OFFLOAD TERMINATION PROCESSING FAILED

**Explanation:** During log manager termination, the off-load function was unable to complete its termination process.

**System Action:** Log manager shutdown continues to the next step.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** One or more error messages describing the specific error preceded this message. Refer to the specific message(s) for error analysis and the appropriate action to take.

**DSNJ239I**  LOG COMMAND TERMINATION PROCESSING FAILED

**Explanation:** During log manager termination, the log command function was unable to complete its termination process.

**System Action:** Log manager shutdown continues to the next step.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** One or more error messages describing the specific error preceded this message. Refer to the specific message(s) for error analysis and the appropriate action to take.

**DSNJ240I**  OUTPUT DATA SET CONTROL TERMINATION PROCESSING FAILED

**Explanation:** During log manager termination, the output data set control function was unable to complete its termination process.

**System Action:** The log manager shutdown continues to the next step.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** One or more error messages describing the specific error preceded this message.
Refer to the specific message(s) for error analysis and the appropriate action to take.

**DSNJ241I** ARCHIVE LOG READ TERMINATION PROCESSING FAILED

**Explanation:** During log manager termination, the archive log read function was unable to complete its termination process.

**System Action:** Log manager shutdown continues to the next step.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** One or more error messages describing the specific error preceded this message. Refer to the specific message(s) for error analysis and the appropriate action to take.

**DSNJ242I** ARCHIVE LOG COMMAND QUIESCE TERMINATION PROCESSING FAILED

**Explanation:** During log manager termination, the quiesce function which supports the -ARCHIVE LOG MODE (QUIESCE) command processing was unable to complete its termination process.

**System Action:** Log manager shutdown continues to the next step.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** One or more error messages describing the specific error preceded this message. Refer to the specific message(s) for error analysis and the appropriate action to take.

**DSNJ243I** OUTPUT BUFFER WRITER TERMINATION PROCESSING FAILED

**Explanation:** During log manager termination, the output buffer writer function was unable to complete its termination process.

**System Action:** Log manager shutdown continues to the next step.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** One or more error messages describing the specific error preceded this message. Refer to the specific message(s) for error analysis and the appropriate action to take.

**DSNJ244I** LOG TERMINATION RECEIVED RETURN CODE nnn FROM xxxxxxxx MACRO

**Explanation:** Log manager termination was passed a bad return code from the named macro.

**System Action:** Log manager termination processing continues.

**Operator Response:** Record the return code and macro name, and notify the system programmer.

**System Programmer Response:** This message is associated with a failure in the named macro. If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**DSNJ245I** CONDITIONAL RESTART RECORD INDICATES TRUNCATION AT xxx rrr. REPLY Y TO CONTINUE, N TO CANCEL

**Explanation:** The conditional restart control record in use indicates that the DB2 log should be truncated at the specified RBA or LRSN.xxx replaced by either RBA or LRSN, and rrr is the value specified in the current record.

**System Action:** If Y, DB2 startup continues. If N, DB2 startup is terminated.

**Operator Response:** Reply Y if the truncation is going to occur at an undesirable point. Notify system programmer. Reply Y to continue the restart.

**System Programmer Response:** Rerun the change log inventory (DSNJU003) utility to modify the conditional restart record.

**DSNJ246I** CONDITIONAL RESTART RECORD INDICATES COLD START AT RBA rrr. REPLY Y TO CONTINUE, N TO CANCEL

**Explanation:** The conditional restart control record in use indicates that DB2 is to be cold started and that logging is to begin at the specified RBA.

**System Action:** If ‘Y’, DB2 startup continues. If ‘N’, DB2 startup is terminated.

**Operator Response:** Reply ‘N’ if the truncation is going to occur at an undesirable point. Notify system programmer. Reply ‘Y’ to continue the cold start.

**System Programmer Response:** Rerun the change log inventory (DSNJU003) utility to modify the conditional restart record.

**DSNJ247I** csect-name I/O ERROR DURING PROCESSING OF rrr RC = rc, REASON = reason

**Explanation:** The I/O error occurred at record ‘rrr’. ‘rc’ indicates the return code received from the I/O operation. ‘reason’ indicates the reason code received from the I/O operation.

If a return code ‘4’ was received, this indicates that the log manager detected a problem. If a return code ‘8’ was received, this indicates a VSAM error.

**System Action:** DB2 startup terminates.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** For a return code of ‘4’, if you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem. For a return code of ‘8’, execute an offline access method services job to determine the cause of the VSAM error.

**DSNJ248I** ARCHIVE LOG READ DEALLOCATION INITIALIZATION PROCESSING FAILED

**Explanation:** During log initialization, the archive log read deallocation process was unable to complete its initialization.

**System Action:** DB2 startup is terminated.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** One or more error messages describing the specific error preceded this message.
Refer to these messages for error analysis and the appropriate action to take.

**DSNJ249I**  
**Explanation:** During log initialization, the archive log read scheduling process was unable to complete its initialization.  
**System Action:** DB2 startup is terminated.  
**Operator Response:** Notify the system programmer.  
**System Programmer Response:** One or more error messages describing the specific error precede this message. Refer to these messages for error analysis and the appropriate action to take.

**DSNJ250E** csect-name DATA SHARING REQUIRES ALL ACTIVE LOG DATA SETS TO BE DEFINED WITH SHAREOPTIONS(2 3) OR HIGHER.  
**Explanation:** DB2 detected an active log data set defined with share options that do not permit recovery operations in a data sharing environment. This message is followed by message DSNJ251E, which identifies the specific active log data set.  
**System Action:** The DB2 subsystem detecting this condition is terminated.  
**System Programmer Response:** Using IDCAMS LISTCAT or TSO LISTCAT, display the share options of all of the active log data sets of all of the members in the data sharing group. For any active log data set that is defined with less than SHAREOPTIONS(2 3), use IDCAMS ALTER or TSO ALTER to alter the data set definitions to SHAREOPTIONS(2 3) or higher.  

**Problem Determination:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on diagnosing and reporting the problem.  
Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051:

1. 2. 5. 11.

**DSNJ251E** csect-name DATA SET dsname FAILS TO MEET THE MINIMUM REQUIRED SHAREOPTIONS FOR DATA SHARING.  
**Explanation:** The share options defined for the data set named in the message are too low to permit the data set to participate in a DB2 data sharing group. All active log data sets must be defined with a minimum of SHAREOPTIONS(2 3) for successful DB2 initialization. See the description of message DSNJ251E for more details.  
**System Action:** The DB2 subsystem detecting this error is terminated.  
**System Programmer Response:** Using IDCAMS LISTCAT or TSO LISTCAT, display the share options of all of the active log data sets of all of the members in the data sharing group. For any active log data set that is defined with less than SHAREOPTIONS(2 3), use IDCAMS ALTER or TSO ALTER to alter the data set definitions to SHAREOPTIONS(2 3) or higher.

**Problem Determination:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on diagnosing and reporting the problem.

**DSNJ301I** csect-name ERROR action ONLINE BOOT-STRAP DATA SET  
**Explanation:** During command processing for the -RECOVER BSDS command or the -ARCHIVE LOG command, an error occurred while performing an operation on the Bootstrap Data Set. The type of operation is specified in the ‘action’ keyword in the message text:

- **ACCESSING** Unable to open the BSDS.  
- **READING** Unable to read a required record from the BSDS.  
- **UPDATING** Unable to write a required record to the BSDS.  
- **RESTORING DUAL** The contents of the stable BSDS was successfully copied to the replacement BSDS; however, the DB2 subsystem was unable to successfully restore dual BSDS operation.

**System Action:** If this message was received during processing of the -RECOVER BSDS command, then the DB2 subsystem will continue in single BSDS mode. If this message was received during processing of the -ARCHIVE LOG command, the archive log history record in the BSDS will not be updated to reflect the occurrence of an -ARCHIVE LOG command; logging and the off-load processing will continue.  
**Operator Response:** Inform the system programmer of the type of error that occurred, and whether the error occurred while processing a -RECOVER BSDS command or an -ARCHIVE LOG command.  
**System Programmer Response:** If this message was received during processing of the -RECOVER BSDS command, then recovery action must be performed on the bootstrap data set before reentering the command. If this message was received during processing of the -ARCHIVE LOG command, no action is necessary.

**DSNJ302I** ALLOCATION ERROR ON REPLACEMENT BSDS DSNAME=... ERROR STATUS=...  
**Explanation:** The RECOVER BSDS command encountered an error while trying to dynamically allocate the specified data set. DSNAME is the data set name. Error Status is the error code and information code returned by MVS dynamic allocation.  
**System Action:** Processing of the command is terminated. The system continues in single BSDS mode.  
**Operator Response:** Determine the cause of the error from the error status contained in the message, and correct the condition. Then reenter the -RECOVER BSDS command.  
**System Programmer Response:** The error status portion of this message contains the 2-byte error code (S99ERROR) followed by the 2-byte information code (S99INFO) from the SVC request block. Refer to the appropriate MVS publication for a description of these codes.

**DSNJ303I** WRITE ERROR ON REPLACEMENT BSDS DSNAME=... ERROR STATUS=...  
**Explanation:** The -RECOVER BSDS command encountered an error while attempting to write to the specified bootstrap data set. Error Status contains the VSAM return and feedback codes. It is a 2-byte field with the first containing the hexadecimal return code and the second containing the hexadecimal feedback code.
System Action: Processing of the command is terminated. The system continues in single BSDS mode.

Operator Response: Notify the system programmer.

System Programmer Response: Execute an offline access method services job to delete or rename the replacement BSDS and define a new BSDS with the same name. Reenter the log manager -RECOVER BSDS command to reestablish dual BSDS mode.

---

System Action: Processing of the command is terminated. The system continues in single BSDS mode.

Operator Response: Notify the system programmer.

System Programmer Response: Execute an offline access method services job to delete or rename the replacement BSDS and define a new BSDS with the same name. Reenter the log manager -RECOVER BSDS command to reestablish dual BSDS mode.

---

System Action: Processing of the command is terminated. DB2 continues in single BSDS mode.

Operator Response: Notify the system programmer.

System Programmer Response: Execute an offline access method services job to delete or rename the replacement BSDS and define a new BSDS with the same name. Reenter the log manager -RECOVER BSDS command to reestablish dual BSDS mode.

---

System Action: Processing of the command is terminated. The command is ignored.

---

System Action: Processing of the command is terminated. The system continues in single BSDS mode.

---

Explanation: An -ARCHIVE LOG command with the MODE(QUIESCE) option has been accepted by the DB2 subsystem. The quiesce processing has commenced.

System Action: The DB2 subsystem will attempt to stop all updates to DB2 resources within the time period specified in the message. Users/jobs operating on the DB2 subsystem will be allowed to reach a point of consistency (commit point) before being blocked from further update activity. Jobs and users will be suspended until they are released by DB2 following the initiation of the off-load processing. If the DB2 subsystem can effectively block all users from performing updates before the maximum specified time, then the off-load will be initiated immediately, and normal processing will be resumed.

The message will display either the word SYNCHRONOUS or ASYNCHRONOUS, to inform the user of the type of quiesce processing which has been used.

- If the word SYNCHRONOUS is displayed, then the invoker used the WAIT(YES) option. This means that quiesce processing will be synchronous to the user; that is, the user can enter additional DB2 commands, but the commands will not be processed by the DB2 command processor until the quiesce processing has ended.

- If the word ASYNCHRONOUS is displayed, then the invoker used the WAIT(NO) option, or did not specify the WAIT option. This means that quiesce processing will be asynchronous to the user; that is, control will be returned to the user as soon as the quiesce task has been started. Thus, the DB2 command processor will accept - and process - any new DB2 commands while the quiesce task is running.

This message will be followed by message DSNJ311I or DSNJ317I.

Operator Response: No operator response is necessary. However, it can be expected that users and jobs using DB2 resources will be suspended (queued) by DB2 through the duration of the specified time interval, or until the DB2 subsystem can be certain that all update activity has been effectively blocked. At some point, this message will be followed by the DSNJ311I message or DSNJ317I message.

---

Explanation: A user-initiated -ARCHIVE LOG command has been accepted by the DB2 subsystem. An asynchronous task to archive (off-load) the active log data set has been started.

System Action: The current active log data set(s) will be truncated and switched to the next available active log data set(s), and an asynchronous off-load task will be initiated to archive the Active log data set(s).

The term ASYNCHRONOUS is used to indicate that control will be returned to the invoker as soon as the off-load task has been started. Thus, the DB2 command processor will accept — and process — any DB2 commands while the off-load task is running.

This message is followed by message DSNJ312I if the MODE(QUIESCE) option was used with the -ARCHIVE LOG command.
**DSNJ312I**  ARCHIVE LOG QUIESCE ENDED. UPDATE ACTIVITY AGAINST DB2 RESOURCES IS NOW RESUMED.

**Explanation:** An -ARCHIVE LOG command with the MODE(QUIESCE) option was processed by the DB2 subsystem. As part of the MODE(QUIESCE) processing, an attempt was made to stop all new update activity against DB2 resources. This message signals the end of the quiesce processing, and the resumption of normal DB2 activity for all users and jobs which were blocked during the quiesce period.

This message follows message DSNJ311I or DSNJ317I.

**System Action:** The DB2 subsystem has now resumed all normal DB2 activity for all users and jobs that were blocked during the quiesce period.

---

**DSNJ313I**  PARAMETER SPECIFIED ON THE keyword KEYWORD (value) IS NOT IN THE RANGE OF ALLOWABLE VALUES

**Explanation:** This message was generated by an error occurring in one of the following commands:
- ARCHIVE LOG command with MODE(QUIESCE)
- SET ARCHIVE
- SET LOG

You specified a value for one of the command options that was outside of the range of allowed values.

**System Action:** Processing for the ARCHIVE LOG, SET ARCHIVE, or SET LOG command is terminated. This message is followed by message DSN9023I.

**Operator Response:** Refer to DB2 Command Reference for the correct syntax of the command. Correct the command syntax and reenter the command.

---

**DSNJ314I**  xxx KEYWORD REQUIRES yyyy KEYWORD TO ALSO BE SPECIFIED ON THE COMMAND

**Explanation:** A command was entered which specified the 'xxxx' keyword. However, use of the 'xxxx' keyword requires that the 'yyyy' keyword also be used.

**System Action:** Command processing terminates for the -ARCHIVE LOG or -RECOVER BSDS command. This message is followed by message DSN9023I.

**Operator Response:** Refer to the DB2 Command Reference for the correct syntax of the command. Correct the command syntax and reenter the command.

---

**DSNJ315I**  -STOP DB2 MODE(FORCE) IN PROGRESS

**Explanation:** An attempt was made to issue an -ARCHIVE LOG command when a -STOP DB2 MODE(FORCE) command was already in progress.

**System Action:** Command processing terminates for the -ARCHIVE LOG command. The -STOP DB2 MODE(FORCE) processing continues.

---

**DSNJ316I**  SYSTEM QUIESCE ALREADY IN PROGRESS

**Explanation:** An attempt was made to issue an -ARCHIVE LOG command with the MODE(QUIESCE) option when a system quiesce was already in progress. The system quiesce could be the result of processing by another -ARCHIVE LOG MODE(QUIESCE) command, or by a -STOP DB2 MODE(QUIESCE) command.

**System Action:** Command processing will terminate. The system quiesce currently in progress will continue.

---

**DSNJ317I**  ARCHIVE LOG QUIESCE PERIOD EXPIRED. NUMBER OF OUTSTANDING UR'S = xxx. ARCHIVE LOG PROCESSING WILL BE TERMINATED, AND UPDATE ACTIVITY AGAINST DB2 RESOURCES WILL BE RESUMED. HH:MM:SS

**Explanation:** An -ARCHIVE LOG MODE(QUIESCE) command was processed by the DB2 subsystem; however, the DB2 subsystem was not able to quiesce all update activity in the user-specified quiesce time interval.

**System Action:** This message is informational only. The DB2 subsystem determined that 'xxxx' units of recovery (URs) did not reach a point of consistency during the quiesce period, and therefore could not be stopped from continuing their associated update processing.

Consequently, the -ARCHIVE LOG processing will be terminated. The current active log data set(s) will not be truncated, and will not be switched to the next available active log data set(s). The log archive (off-load) task will not be created. All jobs and users suspended during the quiesce will be resumed, and normal update activity against DB2 resources will be commenced.

This message will be followed by the DSNJ312I message.

**Operator Response:** Contact the system programmer.

**System Programmer Response:** A determination must be made whether the outstanding (nonquiesced) URs represent significant work.

Each user on the system has a unit of recovery if they are modifying DB2 resources. URs are also created by the DB2 subsystem itself for internal processing. Since the purpose of the MODE(QUIESCE) option is to have all URs reach a point of consistency (commit point) before the active log data set is truncated and off-loaded, determine all outstanding nonqueued jobs and users by using -DISPLAY THREAD and the MVS 'D A,L' operator command.

It should be noted that URs may be outstanding due to lock contention between a user or job which holds a resource (and has reached a point of consistency), and a user or job which wants a lock (and therefore cannot reach a point of consistency).

Before resubmitting the -ARCHIVE LOG command with the MODE(QUIESCE) option, either:
- Wait until the threads have been deallocated.
- Wait until the DB2 subsystem is less busy.
- Force the offending thread(s) to terminate.
- Use the TIME option to dynamically override and extend the maximum quiesce time period specified in ZPARMS.
• Or, if having all URs reach a point of consistency in the active log is no longer critical, issue the -ARCHIVE LOG command without the MODE(QUIESCE) option.

Important: If the decision is made to use the -ARCHIVE LOG command without the MODE(QUIESCE) option, the active log data set(s) will be truncated without regard to quiescing activity on the DB2 subsystem. If the resulting archive log data set is used for recovery, it is possible that some URs may be found to be In-flight, In-Abort, In-Commit, or In-doubt during DB2 initialization.

If expiration of the quiesce period before all URs reach a consistent point are a chronic problem, an adjustment to ZPARMs may have to be made. The quiesce period is controlled by the ‘Maximum Quiesce Period’ ZPARM. Refer to the discussion about the Archive Log Parameters (DSNTIPA) panel in Section 2 of DB2 Installation Guide.

**DSNJ318I**  
**csect-name** ARCHIVE LOG COMMAND ALREADY IN PROGRESS

**Explanation:** An attempt was made to issue an ARCHIVE LOG command when an ARCHIVE LOG command was already in progress. In data sharing, the ARCHIVE LOG command currently in progress could be initiated by another member.

**Operator Response:** If the conflicting command satisfies your archival request, do not reissue the command. Otherwise, wait for the conflicting command to complete and then reissue the -ARCHIVE LOG command.

**DSNJ319I**  
**csect-name** CURRENT ACTIVE LOG DATA SET IS THE LAST AVAILABLE ACTIVE LOG DATA SET. ARCHIVE LOG PROCESSING WILL BE TERMINATED.

**Explanation:** The -ARCHIVE LOG command was rejected because the current active log is the last available active log data set. To process the command when these conditions exist would cause the DB2 subsystem to exhaust its available active log resources and immediately halt processing.

**System Action:** Processing for the command is terminated. If the situation is not corrected, the DB2 subsystem will issue the DSNJ110E message (if it has not already done so) as the available active log data space reaches critically low levels. Ultimately, message DSNJ111E will be issued when the available active log data space is exhausted, and the DB2 online processing will halt until active log space is made available.

**User Response:** Notify the operator or system programmer.

**Operator Response:** To clear this condition, steps must be taken to complete other waiting off-load tasks. Once another active log is made available (re-usable) by completing the off-load process for it, the command processing for the current active log can proceed.

Execute an MVS Display System Requests command (D R L for example) to determine the outstanding requests related to the log off-load process. Take the necessary action to satisfy any requests, and permit off-load to continue. If off-load fails to complete normally, or cannot be initiated, notify the systems programmer.

**System Programmer Response:** Either correct the problem that is causing the off-load process to fail, or add more active log data sets. Note that the latter action requires DB2 to be down and the change log inventory (DSNUU003) utility to be run.

Possible causes for the shortage of active log data space are:

- Excessive logging. For example, too many users requesting logs at the same time, or too many utilities specifying LOG (YES).
- Delayed or slow off-loading. For example, failure to mount archive volumes, incorrect replies to off-load messages, or slow device speeds.
- Excessive use of the -ARCHIVE LOG command. Each invocation of the command causes the DB2 subsystem to switch to a new active log data set. Excessive use could consume the available active log data space if the resulting off-loads were not processed in a timely manner.
- Off-loads(s) failed (see Operator Response).
- Insufficient active log space (see Operator Response).

**DSNJ320I**  
**csect-name** UNABLE TO PROCESS LOG TRUNCATION REQUEST DUE TO SUBSYSTEM COMPONENT action FAILURE

**Explanation:** While processing an -ARCHIVE LOG command, an internal request was made of the log buffer output routine to force-write the log buffers and to truncate and switch the active log to the next available active log data set(s). The request failed during the processing of the ‘action’ specified in the message.

**System Action:** Processing for the command is terminated.

**User Response:** Notify the system programmer.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** This error is an internal error detected by the DB2 subsystem. The error may be caused by an unrelated ABEND in the Log Buffer Writer component (DSNJWxxx), by a -STOP DB2 MODE(FORCE) command, or by abnormal subsystem termination. Refer to messages and ABENDS which precede this message.

**DSNJ321I** UNABLE TO CONTINUE ARCHIVE LOG QUIESCE DUE TO INTERNAL SUBSYSTEM ERROR. ARCHIVE LOG PROCESSING WILL BE TERMINATED, AND UPDATE ACTIVITY AGAINST DB2 RESOURCES WILL BE RESUMED.

**Explanation:** An -ARCHIVE LOG command with the MODE(QUIESCE) option was processed by the DB2 subsystem. As part of the MODE(QUIESCE) processing, an attempt was made to stop all new update activity against DB2 resources. During the internal subsystem interaction between the log manager and the recovery manager, an internal interface error was detected by the recovery manager.

**System Action:** The -ARCHIVE LOG MODE(QUIESCE) processing is terminated. This message will be followed by message DSNJ312I after all users and jobs quiesced by the MODE(QUIESCE) processing are resumed.

**User Response:** Notify the system programmer.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** This error is an internal error detected by the DB2 subsystem. Retry the -ARCHIVE LOG MODE(QUIESCE) command. If the error persists, the active log data sets may be switched using the -ARCHIVE LOG command without the MODE(QUIESCE) option.
**DSNJ322I** DISPLAY ARCHIVE REPORT FOLLOWS—

**Explanation:** This message is always generated as the title for the -DISPLAY ARCHIVE command report output. It precedes the other messages generated by this command.

The series of messages DSNJ323I through DSNJ329I provide the formatted report for -DISPLAY ARCHIVE.

**DSNJ323I** COUNT TIME

**Explanation:** The column headings for the list of parameter specifications generated by the -DISPLAY ARCHIVE command are displayed. The message number is not included in this message.

**DSNJ324I** (TAPE UNITS) (MIN,SEC)

**Explanation:** The format of the COUNT and TIME parameter specifications displayed by the -DISPLAY ARCHIVE command are shown. The message number is not included in this message.

**DSNJ325I** name count time

**Explanation:** This message, in combination with messages DSNJ323I and DSNJ324I, provides the parameter information that is a part of the -DISPLAY ARCHIVE report.

- name: Identifies the count and time values in the message line.
- DSNZPARM: Values specified during DB2 installation.
- CURRENT: Current values in the DB2 system.
- count: The value for COUNT as specified in name.
- time: The value for TIME as specified in name.

The message number is not included in this message.

**DSNJ326I**

**Explanation:** This message separates messages DSNJ325I and DSNJ327I that are generated by the -DISPLAY ARCHIVE command. The message number is not included in this message.

**DSNJ327I** ADDR STATUS CORR-ID VOLSER DATASET_NAME

**Explanation:** This message displays the column headings for the DISPLAY ARCHIVE report.

The message number is not included in this message.

**DSNJ328I** tapeaddr status corr-id vname dsname

**Explanation:** This message, in combination with message DSNJ327I, provides the tape unit information that is part of the -DISPLAY ARCHIVE report.

- tapeaddr: The physical tape address of the tape unit allocated to read archive log.
- status: Status of tape address:
  - BUSY: Tape address is actively processing an archive log data set.

**DSNJ329I** END OF DISPLAY ARCHIVE REPORT

**Explanation:** This message follows messages DSNJ322I through DSNJ328I and indicates that the -DISPLAY ARCHIVE report was generated successfully. The message number is not included in this message.

**DSNJ330I** ARCHIVE LOG VOLUMES REQUIRED FOR CONNECTION ID conn-id CORRELATION ID corr-id

**Explanation:** This message is the title for the ARCHIVE LOG VOLUMES report output. The ARCHIVE LOG VOLUMES report lists the archive log volumes needed by the correlation ID for that connection ID. This message is generated automatically by the archive read process at the first archive log tape mount for corr-id. This message precedes the other messages generated by this action.

This message, in combination with messages DSNJ331I and DSNJ332I, provides the formatted report for the ARCHIVE LOG VOLUMES requested.

**DSNJ331I** avolume, avolume, avolume, avolume ...

**Explanation:** This message provides the tape volume information for the Archive Log Volumes report output.

- avolume: The name of the archive log volume required for this correlation ID. An ‘avolume’ prefixed with an ‘*’ signifies that the data on the archive log volume is also mapped by an active log data set. As such, the ‘avolume’ might not be required for the read process, since the data is read from the active log, if possible.

**DSNJ332I** END OF ARCHIVE LOG VOLUMES REPORT

**Explanation:** This message follows messages DSNJ330I and DSNJ331I and indicates that the ARCHIVE LOG VOLUMES report was generated successfully. The message number is not included in this message.
DSNJ333I  csect-name SYSTEM CHECKPOINT INITIATED

Explanation: This message indicates that the SET LOG command processed successfully and that a system checkpoint has been initiated.

DSNJ334I  PARAMETER SPECIFIED ON THE keyword KEYWORD (VALUE) CONTAINS INVALID CHARACTERS

Explanation: A -SET ARCHIVE command was processed by the DB2 subsystem. One of the command keywords specified a value that contains an invalid character.

System Action: Processing for the -SET ARCHIVE command is terminated. This message is followed by the DSN9023I message.

Operator Response: Refer to DB2 Command Reference for the syntax of the command. Correct the syntax and reenter the command.

DSNJ335I  INVALID KEYWORDS COMBINATION IN SET ARCHIVE COMMAND

Explanation: This command requires that keyword COUNT or keyword TIME be specified. If both are omitted, the keyword DEFAULT must be specified. It is invalid to specify keyword DEFAULT when either the COUNT keyword or TIME keyword is specified.

System Action: Processing for the -SET ARCHIVE command is terminated. This message is followed by the DSN9023I message.

Operator Response: Refer to DB2 Command Reference for the syntax of the command. Correct the syntax and reenter the command.

DSNJ336I  UNABLE TO ALLOCATE TAPE UNIT FOR conn-id corr-id, x ALLOCATED, y ALLOWED.

Explanation: An attempt to allocate a tape unit for connection ID 'conn-id' failed. The current maximum tape unit specified is 'y', but only 'x' are physically available.

System Action: The 'conn-id corr-id' process is queued until either an allocated tape unit becomes free or more tape units are varied online and made available to the DB2 archive read task.

Operator Response: This situation rectifies itself over time as currently allocated tape units become available. To improve throughput, vary additional tape units online and make them available to DB2. Note that a queue rescan is not attempted until the -SET ARC READ COUNT command is issued or when an allocated tape dismounts.

DSNJ337I  SET ARCHIVE COMMAND COMPLETED COUNT(count) TIME(minute,second)

Explanation: This message indicates that the -SET ARCHIVE command processed successfully and displays the current values for COUNT and TIME.

- count: The value for the COUNT parameter
- minute: The 'minute' value for the TIME parameter
- second: The 'second' value for the TIME parameter

DSNJ338I  NO TAPE ARCHIVE READING ACTIVITY

Explanation: This message indicates that there is no current archive tape reading activity to report.

The message number is not included in this message.

DSNJ339I  csect-name SET LOG COMMAND COMPLETED, LOGLOAD(nnnnnnnnn)

Explanation: This message indicates that the SET LOG command processed successfully, and it displays the current value for LOGLOAD. The LOGLOAD value remains in effect until DB2 is restarted or until the value is modified by another SET LOG command.

DSNJ340I  csect-name COMMAND KEYWORD xxx IS ONLY VALID FOR DATA SHARING

Explanation: An attempt was made to issue a DB2 command with KEYWORD xxx on a DB2 that was not initialized to participate in data sharing.

System Action: The command request is rejected.

DSNJ341I  csect-name -ARCHIVE LOG COMMAND NOT ALLOWED, LOGGING IS SUSPENDED

Explanation: An attempt to issue an -ARCHIVE LOG command failed because a -SET LOG SUSPEND command has suspended logging.

System Action: Command processing terminates for the -ARCHIVE LOG command. You may reissue the command when logging has been resumed by the -SET LOG RESUME command.

DSNJ350I  csect-name (A)SYNCHRONOUS ARCHIVE LOG COMMAND QUIESCE PROCESSING STARTED IN DATA SHARING

Explanation: The DB2 subsystem of a data sharing group accepted an ARCHIVE LOG command with the MODE(QUIESCE) option.

Each active DB2 member in the data sharing group performs the quiesce operation. The member originating the quiesce issues message DSNJ350I; all other members issue DSNJ310I as they start quiescing.

DSNJ351I  csect-name MEMBER member name STATUS=member status

Explanation: This message appears in response to MODE(QUIESCE) being specified with the ARCHIVE LOG command. It is one of a list of elements that display archive related status of the indicated member of the data sharing group. These member status messages are preceded by the message DSNJ359I and are followed by DSNJ361I.

member name identifies the member of the data sharing group.

member status indicates archive related status of the named member. It appears as one of the following:

ABNORMALLY TERMINATING

The named member was undergoing abnormal subsystem termination at the time ARCHIVE LOG processing was active for the data sharing group. ARCHIVE LOG command processing for the remainder of the data sharing group terminates unsuccessfully.
ARCHIVE ALREADY ACTIVE

ARCHIVE LOG command processing was running at the named member at the time a succeeding ARCHIVE LOG command was issued. The succeeding ARCHIVE LOG command terminates unsuccessfully for the remaining members of the data sharing group.

CANCELED

ARCHIVE LOG command processing for the named member was canceled due to a problem encountered elsewhere in the data sharing group. The quiesce operation is interrupted and terminated and update activity against DB2 resources is resumed before command processing is terminated for the member.

COMMUNICATIONS FAILURE

A communications failure occurred between the named member and one or more other members in the data sharing group. The quiesce operation is interrupted and update activity against DB2 resources is resumed before command processing is terminated for the member. ARCHIVE LOG command processing for the remainder of the data sharing group terminates unsuccessfully.

FAILED

The named member was inactive at the time the ARCHIVE LOG command was issued. Termination of the DB2 subsystem for this member was normal with no incomplete URs outstanding. Log truncation and offload processing are scheduled to be performed automatically the next time the named member is started. When the member is started, it is important to ensure that archive processing occurs automatically. Certain error conditions might require entering an ARCHIVE LOG command via the operator console to cause log truncation and offload processing to be performed. This member status is accompanied by warning message DSNJ362A.

QUIESCED

The named member was active at the time the ARCHIVE LOG command was issued. Update activity against DB2 resources had successfully quiesced for that member (no active URs) in response to specifying MODE(QUIESCE).

QUIESCED/OFFLOADING

The named member was active at the time the ARCHIVE LOG command was issued. Update activity against DB2 resources had successfully quiesced for that member (no active URs) in response to specifying MODE(QUIESCE). The active log at the time was truncated and an offload process was initiated after all members in the data sharing group had reached a quiesce point.

STOPPED

The named member was inactive at the time the ARCHIVE LOG command was issued. Termination of the DB2 subsystem for this member was normal with no incomplete URs outstanding. Log truncation and offload processing are scheduled to be performed automatically the next time the named member is started. When the member is started, it is important to ensure that archive processing occurs automatically. Certain error conditions might require entering an ARCHIVE LOG command via the operator console to cause log truncation and offload processing to be performed. This member status is accompanied by warning message DSNJ362A.

TIME EXCEEDED

The named member could not quiesce its update activity within the allotted period of time. The incomplete quiesce operation is interrupted and update activity is resumed before command processing is terminated for the member. ARCHIVE LOG command processing for the remainder of the data sharing group is unsuccessfully terminated.

DSNJ352W  csect-name  MEMBERS WERE NOT OFFLOADED

Explanation: DB2 issues this message during processing of an ARCHIVE LOG command with the MODE(QUIESCE) option. One or more quiesced members were not available to receive the archive request. DSNJ351I messages follow to display the quiesced members.

At the next start up of the quiesced member, DB2 switches (truncates) the current active log and initiates the archive task.

DSNJ353I  csect-name  DSNJ353I MEMBER member name NOT RESPONDING.

Explanation: This message is displayed when a response is needed but not received within an expected period of time during ARCHIVE LOG MODE(QUIESCE) command processing. This can occur as a result of abnormal subsystem termination under the named member or, possibly from communications problems among members of the data sharing group.

Operator Response: Examine the console log of the named member for operator information messages that might relate to the problem.

DSNJ354I  csect-name  DSNJ354I  ARCHIVE LOG: ALL ACTIVE MEMBER(S) STARTED OFFLOAD TASKS

Explanation: This message is displayed when MODE(QUIESCE) is specified with the ARCHIVE LOG command, after all active members in the data sharing group have successfully quiesced their update activity within the allotted time period. For each active member in the data sharing group, the active log is truncated and switched, and an offload task is initiated to begin the offload process. Log truncation, switch and offload processing for stopped (and quiesced) members is performed the next time they are started.
switch and offload processing for these inactive members is able to receive the archive request. Active log truncation, log data sharing group either stopped or failed and were not available to receive the archive request. ARCHIVE LOG command, and one or more members of the data sharing group. Message DSNJ353I might also appear with this message.

**Operator Response:** See the list of DSNJ359I member status messages following message DSNJ359I to determine the reason for the archive command failure.

**Explanation:** This message is displayed when MODE(QUIESCE) is specified with the ARCHIVE LOG command, and one or more active members could not successfully quiesce their update activity in the time allotted. Subsystem activity already quiesced is resumed, and ARCHIVE LOG command processing terminates unsuccessfully for all active members in the data sharing group. Message DSNJ353I might also appear with this message.

**System Action:** ARCHIVE LOG command processing terminates unsuccessfully for all members in the group.

**Operator Response:** Refer to messages DSNJ359I, DSNJ351I, and DSNJ361I to determine archive related status of members in the data sharing group.

**Explanation:** This message marks the beginning of a list of one or more DSNJ351I member status messages following message DSNJ359I to determine the reason for the archive command failure.

**System Action:** ARCHIVE LOG command processing terminates unsuccessfully for all members in the group.

**Explanation:** This message appears as a result of the failure of a communications request by one or more members of the data sharing group. This message is likely to be accompanied by DSN7xxx or other error messages and/or an SVC dump.

**System Action:** ARCHIVE LOG command processing terminates unsuccessfully for all members in the group.

**Operator Response:** Refer to messages DSNJ359I, DSNJ351I, and DSNJ361I to determine archive related status of members in the data sharing group.

**Explanation:** This message indicates the unsuccessful outcome of an ARCHIVE LOG MODE(QUIESCE) command. This message indicates that one or more members were unable to quiesce their update activity in the time allowed. It is usually accompanied by one or more related messages (e.g., DSNJ355I), and a list of member status messages indicating the reason for the failure.

**System Action:** ARCHIVE LOG command processing terminates unsuccessfully for all members in the group.

**Operator Response:** Refer to messages DSNJ359I, DSNJ351I, and DSNJ361I to determine archive related status of members in the data sharing group.

**Explanation:** This message marks the beginning of a list of one or more DSNJ351I member status messages and precedes the first status message in the list.

**System Action:** The current value of the LOGLOAD parameter used to determine checkpoint frequency, from DB2 installation or from the SET LOG command.

**Operator Response:** Refer to messages DSNJ359I, DSNJ351I, and DSNJ361I to determine archive related status of members in the data sharing group.

**Explanation:** This message marks the end of a list of one or more DSNJ351I member status messages and follows the last status message in the list.

**System Action:** Status of the offload task:
- BUSY,ALLC Task is busy, allocating an archive log data set. This could indicate a tape mount request is outstanding.
- BUSY,BSDS Task is busy, copying the BSDS data set.
- BUSY,ACTV Task is busy, copying an active log data set.
- BUSY Task is busy, other processing.
- AVAILABLE Task is available for work.

**Explanation:** This message, in combination with message DSNJ370I, provides the output from the DISPLAY LOG command.

**System Action:** The current value of the LOGLOAD parameter used to determine checkpoint frequency, from DB2 installation or from the SET LOG command.

**Operator Response:** Verify that log switch and offload processing does automatically occur when the inactive members are started. Certain error conditions might require the ARCHIVE LOG command to be individually issued for a member if ARCHIVE LOG processing does not occur automatically. Refer to messages DSNJ359I, DSNJ351I, and DSNJ361I to identify the inactive members.

**Explanation:** This message is displayed when either MODE(QUIESCE) or SCOPE(GROUP) is specified with the ARCHIVE LOG command, and one or more members of the data sharing group either stopped or failed and were not available to receive the archive request. Active log truncation, log switch and offload processing for these inactive members is scheduled to be performed the next time those members are started.

**System Action:** The current value of the LOGLOAD parameter used to determine checkpoint frequency, from DB2 installation or from the SET LOG command.

**Operator Response:** Refer to messages DSNJ359I, DSNJ351I, and DSNJ361I to determine archive related status of members in the data sharing group.

**Explanation:** This message marks the beginning of a list of one or more DSNJ351I member status messages and precedes the first status message in the list.

**System Action:** The current value of the LOGLOAD parameter used to determine checkpoint frequency, from DB2 installation or from the SET LOG command.

**Operator Response:** Refer to messages DSNJ359I, DSNJ351I, and DSNJ361I to determine archive related status of members in the data sharing group.

**Explanation:** This message marks the end of a list of one or more DSNJ351I member status messages and follows the last status message in the list.

**System Action:** The current value of the LOGLOAD parameter used to determine checkpoint frequency, from DB2 installation or from the SET LOG command.

**Operator Response:** Refer to messages DSNJ359I, DSNJ351I, and DSNJ361I to determine archive related status of members in the data sharing group.

**Explanation:** This message is displayed when either MODE(QUIESCE) or SCOPE(GROUP) is specified with the ARCHIVE LOG command, and one or more members of the data sharing group either stopped or failed and were not available to receive the archive request. Active log truncation, log switch and offload processing for these inactive members is scheduled to be performed the next time those members are started.

**System Action:** The current value of the LOGLOAD parameter used to determine checkpoint frequency, from DB2 installation or from the SET LOG command.

**Operator Response:** Refer to messages DSNJ359I, DSNJ351I, and DSNJ361I to determine archive related status of members in the data sharing group.

**Explanation:** This message marks the beginning of a list of one or more DSNJ351I member status messages and precedes the first status message in the list.

**System Action:** The current value of the LOGLOAD parameter used to determine checkpoint frequency, from DB2 installation or from the SET LOG command.

**Operator Response:** Verify that log switch and offload processing does automatically occur when the inactive members are started. Certain error conditions might require the ARCHIVE LOG command to be individually issued for a member if ARCHIVE LOG processing does not occur automatically. Refer to messages DSNJ359I, DSNJ351I, and DSNJ361I to identify the inactive members.

**System Action:** The current value of the LOGLOAD parameter used to determine checkpoint frequency, from DB2 installation or from the SET LOG command.

**Operator Response:** Refer to messages DSNJ359I, DSNJ351I, and DSNJ361I to determine archive related status of members in the data sharing group.

**Explanation:** This message marks the end of a list of one or more DSNJ351I member status messages and follows the last status message in the list.

**System Action:** The current value of the LOGLOAD parameter used to determine checkpoint frequency, from DB2 installation or from the SET LOG command.

**Operator Response:** Refer to messages DSNJ359I, DSNJ351I, and DSNJ361I to determine archive related status of members in the data sharing group.

**Explanation:** This message is displayed when either MODE(QUIESCE) or SCOPE(GROUP) is specified with the ARCHIVE LOG command, and one or more members of the data sharing group either stopped or failed and were not available to receive the archive request. Active log truncation, log switch and offload processing for these inactive members is scheduled to be performed the next time those members are started.

**System Action:** The current value of the LOGLOAD parameter used to determine checkpoint frequency, from DB2 installation or from the SET LOG command.

**Operator Response:** Refer to messages DSNJ359I, DSNJ351I, and DSNJ361I to determine archive related status of members in the data sharing group.

**Explanation:** This message marks the beginning of a list of one or more DSNJ351I member status messages and precedes the first status message in the list.

**System Action:** The current value of the LOGLOAD parameter used to determine checkpoint frequency, from DB2 installation or from the SET LOG command.

**Operator Response:** Verify that log switch and offload processing does automatically occur when the inactive members are started. Certain error conditions might require the ARCHIVE LOG command to be individually issued for a member if ARCHIVE LOG processing does not occur automatically. Refer to messages DSNJ359I, DSNJ351I, and DSNJ361I to identify the inactive members.

**System Action:** The current value of the LOGLOAD parameter used to determine checkpoint frequency, from DB2 installation or from the SET LOG command.

**Operator Response:** Refer to messages DSNJ359I, DSNJ351I, and DSNJ361I to determine archive related status of members in the data sharing group.

**Explanation:** This message marks the end of a list of one or more DSNJ351I member status messages and follows the last status message in the list.

**System Action:** The current value of the LOGLOAD parameter used to determine checkpoint frequency, from DB2 installation or from the SET LOG command.

**Operator Response:** Refer to messages DSNJ359I, DSNJ351I, and DSNJ361I to determine archive related status of members in the data sharing group.

**Explanation:** This message is displayed when either MODE(QUIESCE) or SCOPE(GROUP) is specified with the ARCHIVE LOG command, and one or more members of the data sharing group either stopped or failed and were not available to receive the archive request. Active log truncation, log switch and offload processing for these inactive members is scheduled to be performed the next time those members are started.

**System Action:** The current value of the LOGLOAD parameter used to determine checkpoint frequency, from DB2 installation or from the SET LOG command.

**Operator Response:** Refer to messages DSNJ359I, DSNJ351I, and DSNJ361I to determine archive related status of members in the data sharing group.

**Explanation:** This message marks the beginning of a list of one or more DSNJ351I member status messages and precedes the first status message in the list.

**System Action:** The current value of the LOGLOAD parameter used to determine checkpoint frequency, from DB2 installation or from the SET LOG command.

**Operator Response:** Verify that log switch and offload processing does automatically occur when the inactive members are started. Certain error conditions might require the ARCHIVE LOG command to be individually issued for a member if ARCHIVE LOG processing does not occur automatically. Refer to messages DSNJ359I, DSNJ351I, and DSNJ361I to identify the inactive members.

**System Action:** The current value of the LOGLOAD parameter used to determine checkpoint frequency, from DB2 installation or from the SET LOG command.

**Operator Response:** Refer to messages DSNJ359I, DSNJ351I, and DSNJ361I to determine archive related status of members in the data sharing group.

**Explanation:** This message marks the end of a list of one or more DSNJ351I member status messages and follows the last status message in the list.
# DSNJ372I  csect-name UPDATE ACTIVITY HAS BEEN SUSPENDED FOR xxxx AT RBA yyyy yyyy yyyy yyyy yyyy yyyy.
# PRIOR CHECKPOINT RBA zzzzzzzzzzzzzzzzzzz.

**System Action:** All log and database update activity has been suspended for DB2 subsystem xxxx. yyyy yyyy yyyy yyyy yyyy yyyy contains the RBA of the last record written to the log. zzzzzzzzzzzzzzzzzzz contains the RBA of the last system checkpoint.

**Explanation:** This message indicates that the -SET LOG command was issued but update activity is not suspended.

**User Response:** Correct the control statement and rerun the utility.

# DSNJ373I  csect-name UPDATE ACTIVITY HAS BEEN RESUMED FOR xxxx.

**System Action:** All log and database update activity has been resumed for DB2 subsystem xxxx.

**Explanation:** This message indicates that the -SET LOG command was issued but update activity is not suspended.

**User Response:** Issue the -SET LOG command with the RESUME keyword when ready to resume update activity.

# DSNJ374I  csect-name SET LOG options COMMAND FAILED, reason.

**System Action:** Command processing terminates.

**Explanation:** A -SET LOG command has failed. options were not specified on the command. reason describes the cause of the failure.

**User Response:** Correct the control statement and rerun the utility.

# DSNJ401I  csect-name rrrr RECORD NOT FOUND

**Explanation:** An attempt was made to read the 'rrrr' record from the BSDS. In so doing, the read routine (DSNJ01B) could not find the record.

**System Action:** Utility processing continues. This message is written to the SYSPRINT data set, not to a console.

# DSNJ402I  UNABLE TO LOCATE aaaa TBLSPACE NAME IN SYSTEM CATALOG OR DIRECTORY DATABASES.

**Explanation:** The TBLSPACE parameter of the change log inventory (DSNJU003) utility SYSTEMDB statement could not be found in any DB2 subsystem catalog or directory database. The table space name in error is named in the 'aaaaa' message keyword.

**System Action:** All subsequent DSNJU003 utility statements are bypassed, and DSNJU003 processing is terminated with a return code of 4. The DB2 SYSTEMDB record is not updated. This message is written to the SYSPRINT data set, not to a console.

**User Response:** Correct the control statement and rerun the utility.

# DSNJ403I  CAPACITY OF BSDS SYSTEMDB RECORD EXCEEDED.

**System Action:** All subsequent change log inventory (DSNJU003) utility statements are bypassed, and DSNJU003 processing is terminated with a return code of 4. The DB2 SYSTEMDB record is not updated.

**Explanation:** The BSDS SYSTEMDB record contains VSAM passwords for data sets in the DB2 catalog and directory, and has a maximum capacity of 168 entries. This message is issued when the number of eligible DB2 catalog and directory data sets exceeds the maximum capacity of the BSDS SYSTEMDB record. This is an internal error.

**User Response:** Correct the control statement and rerun the utility.

# DSNJ404E  keyword NOT ALLOWED FOR operation operation.

**System Action:** The current utility processing is terminated.

**Explanation:** An invalid keyword was used during the operation named 'operation'.

**User Response:** Correct the control statement and rerun the utility.

# DSNJ405E  keyword1 KEYWORD MUTUALLY EXCLUSIVE WITH keyword2 KEYWORD.

**System Action:** The current utility processing is terminated.

**Explanation:** 'keyword1' and 'keyword2' are mutually exclusive and cannot appear on the same control statement.

**User Response:** Determine the extraneous keyword and remove it from the control statement. Rerun the utility.

# DSNJ406E  EITHER keyword1 KEYWORD OR keyword2 KEYWORD MUST BE SPECIFIED.

**System Action:** The current utility processing is terminated.

**Explanation:** A required keyword was not used on the control statement. Use either 'keyword1' or 'keyword2' with the attempted control statement type.

**User Response:** Correct the control statement and rerun the utility.
**DSNJ407E**  
**csect-name NO VALID CHECKPOINT RBA FOUND**  

**Explanation:** After completing its search through the resource manager status table and the checkpoint queue, no valid checkpoint RBA was found within the specified range.

**System Action:** The current utility processing is terminated. This message is written to the SYSPRINT data set, not to a console.

**User Response:** The last 100 checkpoints are recorded in the BSDS, including the log STARTRBA and log ENDRBA of the checkpoint range. When either STARTRBA or ENDRBA are specified, the change log inventory (DSNJU003) utility attempts to locate a valid checkpoint in the range. In this case, DSNJU003 was unsuccessful in finding a valid checkpoint.

Do one of the following, as appropriate:

- If no checkpoint exists in the STARTRBA/ENDRBA range, set STARTRBA=ENDRBA and cold start DB2.
- If the ENDRBA is less than all recorded checkpints or the STARTRBA is higher than all recorded checkpoints, then use DSN1LOGP to locate a valid checkpoint. Use DSN1LOGP SUMMARY(ONLY) option to find a valid checkpoint. Message DSNJ1153I is issued if any complete checkpoint is found. DSNJ1153I identifies the log RBA of the checkpoint. Update the CHKPTRBA parameter using the log RBA identified in DSNJ1153I and resubmit DSNJU003.

**DSNJ408I**  
**csect-name CHECKPOINT RBA FOUND, RBA = rba, TIME = time**  

**Explanation:** After completing its search through the resource manager status table and the checkpoint queue, `rba` was the most recent checkpoint RBA in the specified range and `time` was the time of the checkpoint.

**System Action:** Utility processing continues.

**DSNJ409I**  
**UNABLE TO WRITE ACTIVE LOG RECORD TO THE BSDS DATASET. DDNAME=xxxxxx**  

**Explanation:** A program encountered an I/O error when attempting to write a BSDS active log record to the BSDS data set. `xxxxxx` is the DDNAME of the BSDS data set being accessed.

**System Action:** The program will terminate.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** One or more error messages describing the specific error preceded this message. This error is considered unrecoverable and will leave the BSDS data set in an uncertain state. It will be necessary to either: recreate the data set using access method service routines and then use change log inventory (DSNJU003) to make the active and archive log data set(s) known to the BSDS, or recover the BSDS using a backup copy.

**DSNJ410E**  
**csect-name I/O ERROR DURING nnn PROC-ESSING OF yyy RECORD**  

**Explanation:** An I/O error occurred during a READ or WRITE of a record. `nnn` is either READ or WRITE, depending on the operation. `yyy` specifies the Conditional Restart control record, checkpoint queue record, archive log command history record, or resource manager status table.

**System Action:** The current utility processing is terminated. This message is written to the SYSPRINT data set, not to a console, and will be accompanied by message DSNJ212E or DSNJ213E.

**User Response:** Determine the cause of the I/O error based upon the error status information provided in messages DSNJ212E or DSNJ213E.

**DSNJ411I**  
**csect-name CRESTART nnnn FOR CRCRID = yyyy, DDNAME = ddname**  

**Explanation:** A CRESTART request has just completed. `nnnn` is either CREATE or CANCEL. `yyyy` is the restart control record hexadecimal identifier and `ddname` is the BSDS data set (SYSUT1 or SYSUT2) associated with the request.

**System Action:** Current utility processing continues. This message is written to the SYSPRINT data set, not to a console.

**User Response:** Note the record identifier for future reference.

**DSNJ412E**  
**csect-name RESTART CONTROL RECORD NOT FOUND IN BSDS**  

**Explanation:** The CRESTART CANCEL keyword was specified but the conditional restart control record does not exist in the BSDS data set.

**System Action:** Current utility processing is terminated. This message is written to the SYSPRINT data set, not to a console.

**User Response:** CREATE the conditional restart control record prior to attempting the CANCEL function.

**DSNJ413E**  
**csect-name INVALID LOG RANGE SCOPE OR CHECKPOINT SPECIFIED**  

**Explanation:** The values specified thru the STARTRBA, ENDRBA, and CHKPTRBA keywords are invalid.

**System Action:** Current utility processing is terminated. This message is written to the SYSPRINT data set, not to a console.

**User Response:** Ensure that the log range values are correct and correspond to the other log range values either specified or defaulted. A valid log range is where STARTRBA is less than or equal to ENDRBA, and CHKPTRBA is less than ENDRBA. The STARTRBA must be less than or equal to the ENDRBA.
**DSNJ414I**  csect-name COLD START WILL RESULT FROM THIS RESTART CONTROL RECORD. FORWARD AND BACKOUT SET TO NO.

**Explanation:** STARTRBA and ENDRBA are equal. A cold start will result if this restart control record is used during DB2 restart. No forward or backout processing will be performed.

**System Action:** CRESTART processing continues.

**User Response:** No additional actions are required if a cold start of the system is desired. If a cold start is not desired, reissue the CRESTART and either CANCEL the current restart control record, or CREATE a new restart control record.

**DSNJ415E**  csect-name ENDRBA = rba IS INVALID, MUST BE A MULTIPLE OF 4K

**Explanation:** The specified ENDRBA at 'rba' is not a multiple of 4KB.

**System Action:** CRESTART processing is terminated.

**User Response:** Correct the ENDRBA value on the CRESTART statement and rerun the utility.

**DSNJ416I**  WARNING - BSDS UTILITY TIMESTAMP MISMATCH DETECTED. PROCESSING CONTINUES.

**Explanation:** As a result of a change log inventory (DSNJU003) update, it was discovered that the SYSUT1 BSDS and SYSUT2 BSDS timestamps are unequal. Being unequal indicates the possibility of a BSDS mismatch.

**System Action:** Current utility processing continues.

**User Response:** Run the print log map (DSNJU004) utility against the SYSUT1 BSDS and SYSUT2 BSDS. Determine if each BSDS is current. If each BSDS is current, this warning can be ignored. If either BSDS is not current, delete the obsolete data set and define a replacement data set, then copy the current BSDS into the replacement data set.

**DSNJ417I**  REQUIRED xxxxxxxx PARAMETER FOR yyyy yyyy OPERATION IS MISSING

**Explanation:** A required parameter 'xxxxxxx' for a Log utility operation was missing from the Log utility control statement. The attempted operation is 'yyyyyyyy'.

**System Action:** The Log utility 'yyyyyyyy' operation does not perform its function. All subsequent Log utility control statements are processed. A nonzero return code is issued by the utility.

DB2 writes this message to the SYSPRINT data set, not to a console.

**User Response:** Add the missing parameter to the control statements associated with the specified operation and rerun the utility.

**DSNJ418I**  WARNING - A NOTREUSEABLE ACTIVE LOG DATA SET WAS DELETED FROM BSDS LOG INVENTORY, STARTRBA=...,ENDRBA=...

**Explanation:** The data set name specified on the DSNM parameter of the change log inventory (DSNJU003) utility DELETE statement was a NOTREUSEABLE active log.

**System Action:** DSNJU003 processing continues, it will terminate with a return code of 4. This message is written to the SYSPRINT data set, not to a console.

**User Response:** No additional actions are required if a deletion of a NOTREUSEABLE active log was desired. If this was not desired, recreate the deleted log by using the NEWLOG statement with the RBA values specified in the warning message.

**DSNJ419I**  UNABLE TO WRITE ARCHIVE LOG RECORD TO THE BSDS DATASET. DDNAME=xxxxxx

**Explanation:** A program encountered an I/O error when attempting to write a BSDS archive record to the BSDS data set. 'xxxxxx' is the DDNAME of the BSDS data set being accessed.

**System Action:** The program will terminate.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** One or more error messages describing the specific error preceded this message. This error is considered unrecoverable and will leave the BSDS data set in an uncertain state. It will be necessary to either: recreate the data set using access method service routines and then use change log inventory (DSNJU003) utility to make the active and archive log data set(s) known to the BSDS, or recover the BSDS using a backup copy.

**DSNJ420I**  UNABLE TO WRITE BCR1 RECORD TO BSDS DATASET. DDNAME=xxxxxx

**Explanation:** A program encountered an I/O error when attempting to write the BSDS control record to the BSDS data set. 'xxxxxx' is the DDNAME of the BSDS data set being accessed.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** One or more error messages describing the specific error preceded this message. Refer to the specific message(s) for error analysis and the appropriate action to take.

**DSNJ421I**  THE BSDS IS NOT AT THE PROPER RELEASE LEVEL. DDNAME=xxxxxx

**Explanation:** This message is issued when a program attempting to access The BSDS data set is not at a compatible release level. This can be one of the following:

- The program accessing the BSDS data set is at a NEW release level and the BSDS is at the old level.
- The program accessing the BSDS data set is at an OLD release level and the BSDS is at the NEW level.
- The program encountered an UNKNOWN release level on the BSDS data set.

**System Action:** The program will terminate with no action taken.
System Programmer Response: If the program that encountered the error was one of the BSDS conversion programs (DSNJMIG0 or DSNJFAL0) an unrecoverable error was found on the BSDS data set and it must be recreated. If the error was encountered running some other utility program (i.e., change log inventory or print log map), one of the following actions may be taken:

- Run a version of the program that is compatible with the release level of the BSDS.
- Run the appropriate formatting program (DSNJMIG0 or DSNJFAL0) to convert the BSDS data set to a release level compatible with the running program. If this was successful, rerun the original program.

**DSNJ422I** LOG RECORDS HAVE ALREADY BEEN FORMATTED - THIS UTILITY WILL TERMINATE

Explanation: This message will occur when one of the BSDS formatting programs detects the BSDS had already been reformatted or was already at the desired format level.

System Action: The program will terminate without any action being taken.

System Programmer Response: If the appropriate BSDS formatting program was being run, no further action is necessary.

**DSNJ423I** ACTIVE LOG MAY NOT HAVE BEEN ARCHIVED. DSN=xYYYYY

Explanation: The program was attempting to convert an old BSDS data set with more than 31 active log data sets to the new format. The program will drop the oldest active log data set(s) to get to the new maximum (31) limit. When dropping one of the old active log data sets from the BSDS, it was found to have been flagged as NOT REUSABLE (i.e., this data set MAY NOT have been archived). 'YYYYYY' will contain the data set name of the active log in question.

System Action: The program will remove this active log data set from the BSDS and continue.

System Programmer Response: Check to see if this data set had been archived. The active log data set was not deleted on disk but removed only from the BSDS data set, so it may still be archived, if needed. Use access method service routines to copy the VSAM active log data set to a sequential archive log data set.

**DSNJ424I** csect-name INVALID CONTROL STATEMENT. THE SECOND WORD MUST BE 'DDNAME' OR '*' OR MUST START WITH A PARENTHESIS.

Explanation: The control statement is invalid.

System Action: The control statement is ignored. DB2 uses the SYSUT1 DD statement to locate the BSDS to be mapped. If the SYSUT1 DD statement is not available, the utility terminates.

User Response: Refer to *DB2 Utility Guide and Reference* for information on creating a print log map (DSNJU004) utility control statement. Correct or remove the control statement and rerun the job.

**DSNJ425I** INVALID xYYYYY VALUE/FORMAT FOR yYYYYY PARAMETER (YYYYYDDHHMMSSST)

Explanation: The field in the 'yyyyyyyy' parameter contains an incorrect value or incorrect format.

System Action: The current utility is terminated. This message is written to the SYSPRINT data set, not to a console.

User Response: Correct the control statement and rerun the utility.

**DSNJ426I** ENDTIME VALUE CANNOT BE LESS THAN STARTIME VALUE

Explanation: The 'STARTIME' and 'ENDTIME' parameters specify a time range. Hence, the ENDTIME value must be equal to or greater than STARTIME value.

System Action: The current utility is terminated. This message is written to the SYSPRINT data set, not to a console.

User Response: Correct the control statement and rerun the utility.

**DSNJ427I** CHECKPOINT RECORD ADDED TO QUEUE

Explanation: The checkpoint record specified has been added to the checkpoint queue.

System Action: The BSDS checkpoint queue is modified as stated. This message is written to the SYSPRINT data set, not to a console.

**DSNJ428I** CHECKPOINT RECORD DELETED FROM QUEUE, STARTRBA=startrba, ENDRBA=endrba

Explanation: The checkpoint record specified has been deleted from the Checkpoint Queue. 'startrba' and 'endrba' was the RBA range indicated in the deleted checkpoint record.

System Action: The BSDS checkpoint queue is modified as stated. This message is written to the SYSPRINT data set, not to a console.

**DSNJ429I** RBA RANGE CONFLICTS WITH EXISTING CHECKPOINT RECORD RBA RANGE

Explanation: The specified RBA range for the new checkpoint record either exists or overlaps an existing RBA range in the checkpoint queue.

System Action: The current utility is terminated. This message is written to the SYSPRINT data set, not to a console.

User Response: Run the print log map (DSNJU004) utility against the SYSUT1 BSDS and SYSUT2 BSDS. Determine the correct RBA range and correct the STARTRBA and ENDRBA parameters and rerun the utility.
DSNJ430I  SPECIFIED ENTRY CANNOT BE ADDED WITHOUT OVERLAYING EXISTING LOWEST ENTRY

Explanation:  The specified RBA range for the new checkpoint record is less than the existing lowest entry. The checkpoint queue is currently full and cannot add the new entry without overlaying the lowest entry.

System Action:  The current utility is terminated. This message is written to the SYSPRINT data set, not to a console.

User Response:  Run the print log map (DSNJU004) utility against the SYSUT1 BSDS and SYSUT2 BSDS. Determine the lowest existing entry and either change the STARTRBA and ENDRBA parameters or delete the existing lowest entry and add the new low checkpoint entry and rerun the utility.

DSNJ431I  STARTRBA SPECIFIED NOT FOUND IN CHECKPOINT QUEUE

Explanation:  The specified STARTRBA could not be located in the checkpoint queue.

System Action:  The current utility is terminated. This message is written to the SYSPRINT data set, not to a console.

User Response:  Run the print log map (DSNJU004) utility against the SYSUT1 BSDS and SYSUT2 BSDS. Determine the correct STARTRBA value and correct the STARTRBA parameter and rerun the utility.

DSNJ432I  THE OFFLRBA VALUE MUST END WITH ‘FFF’

Explanation:  The OFFLRBA value is invalid. It must end with ‘FFF’.

System Action:  The current utility is terminated. This message is written to the SYSPRINT data set, not to a console.

User Response:  Correct the control statement and rerun the utility.

DSNJ433I  csect-name INVALID CONTROL STATEMENT. A MEMBER LIST MUST CONTAIN AT LEAST ONE MEMBER NAME.

Explanation:  The control statement is invalid. The member list is either empty or in the wrong format.

System Action:  The control statement is ignored. DB2 uses the SYSUT1 DD statement to locate the BSDS to be mapped. If the SYSUT1 DD statement is not available, the utility terminates.

User Response:  Refer to DB2 Utility Guide and Reference for information on creating a print log map (DSNJU004) utility control statement. Correct or remove the control statement and rerun the job.

Problem Determination:  If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B.

DSNJ434I  csect-name SYSIN MUST CONTAIN AT LEAST ONE RECORD.

Explanation:  A SYSIN DD statement was provided, but the data set was null, or the JCL statement "/*/SYSIN DD " was immediately followed by the statement "/".

System Action:  The error is ignored. DB2 uses the DD SYSUT1 statement to locate the BSDS to be mapped. If the SYSUT1 DD statement is not available, the utility terminates.

User Response:  Refer to DB2 Utility Guide and Reference for information on creating a print log map (DSNJU004) utility control statement. Correct or remove the control statement and rerun the job.

Problem Determination:  If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B.

DSNJ435I  csect-name THE MEMBER LIST OF A CONTROL STATEMENT MUST BE TERMINATED WITH A PARENTHESIS.

Explanation:  The control statement contained the correct format for starting a list of members, but the terminating parenthesis was not found.

System Action:  The control statement is accepted with an assumed parenthesis after the last member name recognized, and processing continues.

User Response:  Refer to DB2 Utility Guide and Reference for information on creating a print log map (DSNJU004) utility control statement. Correct or remove the control statement and rerun the job.

Problem Determination:  If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B.

DSNJ436I  csect-name THE DD STATEMENT FOR ddname IS MISSING.

Explanation:  The print log map (DSNJU004) utility requested information about the identified ddname from the MVS Dynamic Allocation facility, but the DD statement was not found in the job.

System Action:  The job is terminated.

User Response:  Refer to DB2 Utility Guide and Reference for information on required JCL statements. Correct the JCL and rerun the job.

Problem Determination:  If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B.
DSNJ437I  csect-name UNABLE TO ALLOCATE BSDS
dsname. SVC 99 RTN CODE rc, RSN CODE
rsncd, INFO infocd.

Explanation: The print log map (DSNJU004) utility attempted
to allocate a BSDS data set using the MVS Dynamic Allocation
facility, but the system was unable to complete the allocation.
The return code, reason code, and information code were
returned by the system’s SVC 99 facility. See MVS/ESA
Programming: Authorized Assembler Services Guide for an
explanation of these codes.

System Action: The processing of the BSDS named in the
message is terminated. If this is the last (or only) BSDS to be
processed by this job, the job is terminated.

User Response: Refer to DB2 Utility Guide and Reference
for information on required JCL statements. Correct the JCL
and rerun the job.

Problem Determination: If you suspect an error in DB2, refer
to Section 3 of DB2 Utility Guide and Reference for information
on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B,
“Problem determination” on page 1051: 32.

DSNJ438I  csect-name THE xxx VALUE MUST END WITH
‘yyy’

Explanation: The STARTRBA or ENDRBA value specified on the
NEWLOG statement is invalid. ‘xxx’ is either STARTRBA
or ENDRBA, depending on which parameter is invalid. If ‘xxx’
equals STARTRBA, then ‘yyy’ equals ‘000’ and if ‘xxx’ equals
ENDRBA, then ‘yyy’ equals ‘FFF’.

System Action: The current utility is terminated. This
message is written to the SYSPRINT data set, not to a
console.

User Response: Correct the control statement and rerun the
utility.

*DSNJ700I  csect_name ERROR ATTEMPTING TO ACCESS
BSDS FOR PEER MEMBER ID= member-id,
MEMBER NAME= member-name,
REASON-CODE= reason-code.

Explanation: DB2 issues this message to identify the peer
member ID, and if known, the peer member name associated
with listed DB2 reason code.

System Action: An execution unit issues this message and
then, if this was an unconditional request, writes a record to
SYS1.LOGREC and requests an SVC dump. The execution
unit then terminates.

Operator Response: Collect all relevant diagnostic materials,
including SYS1.LOGREC, SVC dump, and console output of
peer and host.

System Programmer Response: Review the explanation for
the associated DB2 reason code for further action.

DSNJ701E  csect-name MEMBER NAME (membername) IN
BSDS DOES NOT MATCH MEMBER NAME
(membername) IN DB2 SYSTEM PARAMETERS
dsnzparm

Explanation: During startup, DB2 detected that the member
name listed in its bootstrap data set (BSDS) does not match
the member name in the DB2 system parameters load module.

Operator Response: Notify the system programmer.

System Programmer Response: Restore the BSDS or
specify a different system parameters load module on the
START DB2 command.

DSNJ702E  csect_name GENERIC LU NAME lu-name IN
BSDS DOES NOT MATCH THE GENERIC LU
NAME lu-name ASSOCIATED WITH THE DATA
SHARING GROUP.

Explanation: DB2 issues this message during startup when it
detects that the generic LU name in the bootstrap data set
(BSDS) does not match the generic LU name in the shared
communications area (SCA) structure.

System Action: DB2 startup continues.

Operator Response: Notify the system programmer.

System Programmer Response: Depending on the accuracy
of the BSDS value, take one of the following actions:

- BSDS value is correct: DB2 startup will automatically
  replace the generic LU name in the SCA with the correct
  value. The BSDS for each member of this DB2 data
  sharing group must specify this same value for generic LU
  name. If any member specifies a different value for
  generic LU name, use the change log inventory utility
  (DSNJU003) to change the generic LU name, as described
  in DB2 Utility Guide and Reference.

- BSDS value is not correct: DB2 startup will replace the
generic LU name in the SCA. The SCA value will be incor-
correct when startup is complete. Take the following actions
to correct this situation:
  - Stop this DB2 subsystem.
  - Use the change log inventory utility (DSNJU003) to
    change the generic LU name of this member, as
    described in DB2 Utility Guide and Reference.
  - Issue START DB2 for this member. START DB2 will
    correct the generic LU name contained in the SCA.

DSNJ703E  csect-name GROUP NAME (groupname) IN
BSDS DOES NOT MATCH GROUP NAME
(groupname) IN DB2 SYSTEM PARAMETERS
dsnzparm

Explanation: During startup, DB2 detected that the group
name listed in its bootstrap data set (BSDS) does not match
the group name in the DB2 system parameters load module.

Operator Response: Notify the system programmer.

System Programmer Response: Restore the BSDS or
specify a different system parameters load module on the
START DB2 command.
**DSNJ704I csect-name NEW MEMBER(member-name)**
**START-UP NOT ALLOWED WHEN GROUP-RESTART IS REQUIRED FOR GROUP(group-name).**

**Explanation:** One of the following occurred:

- A new member member-name tried to start when a group restart of data sharing group group-name is required.
- A member other than the originating member of a data sharing group attempted to start the new DB2 data sharing group. The originating member of a group is either an existing DB2 subsystem which formed the data sharing group or a new DB2 subsystem which was installed to form the group.

**System Action:** The DB2 subsystem stops.

**Operator Response:** Start a previously active member of this group. When the required group restart is completed, start the new member again.

If this is the very first startup of the group, you must start the originating member first before starting any other member.

---

**DSNJ705I csect-name THE DB2 SYSTEM PARAMETERS SPECIFY DATA SHARING, BUT THE BSDS SPECIFIES NON-DATA SHARING.**

**Explanation:** The system parameters passed on the DB2 start command specified data sharing, but the bootstrap data set (BSDS) did not indicate this DB2 is a data sharing member.

**System Action:** The DB2 subsystem stops.

**Operator Response:** If this DB2 should be a member of a data sharing group, inform the system programmer. If this DB2 is not a member of a data sharing group, reassemble the system parameters load module.

**System Programmer Response:** If this DB2 should be a member of a data sharing group, reassemble the system parameters load module and specify DSHARE=YES. If this DB2 is not a member of a data sharing group, execute the installation job DSNTIJG, which updates the BSDS for non-data sharing.

---

**DSNJ707E csect_name LOCATION NAME location-name IN BSDS DOES NOT MATCH THE LOCATION NAME location-name ASSOCIATED WITH THE DATA SHARING GROUP.**

**Explanation:** DB2 issues this message during startup when it detects that the LOCATION name in the bootstrap data set (BSDS) does not match the LOCATION name in the system communications area (SCA) structure.

**System Action:** DB2 startup continues.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Depending on the accuracy of the BSDS value, take one of the following actions:

- **BSDS value is correct:** DB2 startup will automatically replace the LOCATION name in the SCA with the correct value. The BSDS for each member of this DB2 data sharing group must specify this same value for LOCATION. If any member specifies a different value for LOCATION, use the change log inventory utility (DSNJU003) to change the LOCATION name, as described in DB2 Utility Guide and Reference.

- **BSDS value is not correct:** DB2 startup will replace the LOCATION name in the SCA. The SCA value will be incorrect when startup is complete. Take the following actions to correct this situation:
  - Stop this DB2 subsystem.
  - Use the change log inventory utility (DSNJU003) to change the LOCATION name of this member, as described in DB2 Utility Guide and Reference.
  - Issue START DB2 for this member. START DB2 will correct the LOCATION name contained in the SCA.

---

**DSNJ711E csect-name SCA OPEN FAILURE ENCOUNTERED.**

**Explanation:** A failure occurred during command processing in an attempt to open an object in the SCA.

**System Action:** Command processing terminates unsuccessfully.

**System Programmer Response:** Obtain SYS1.LOGREC and possible SVC dump for analysis.

**Problem Determination:** Review the DB2 system console for possible DSN7xxxx and/or SVC dump messages that could relate to this problem.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
**DSNJ712E**  
`csect-name` SCA READ FAILURE ENCOUNTERED.

**Explanation:** A failure occurred during command processing attempting to read from the SCA.

**System Action:** Command processing terminates unsuccessfully.

**System Programmer Response:** Obtain SYS1.LOGREC and possible SVC dump for analysis.

**Problem Determination:** Review the DB2 system console for possible DSN7xxxx and/or SVC dump messages that could relate to this problem.

If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

---

**DSNJ713E**  
`csect-name` SCA WRITE FAILURE ENCOUNTERED.

**Explanation:** A failure occurred during command processing attempting to write to the SCA.

**System Action:** Command processing terminates unsuccessfully.

**System Programmer Response:** Obtain SYS1.LOGREC and possible SVC dump for analysis.

**Problem Determination:** Review the DB2 system console for possible DSN7xxxx and/or SVC dump messages that could relate to this problem.

If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

---

**DSNJ994I**  
`csect-name` VSAM OPEN ERROR, ACBERRFLG = error-code

**Explanation:** VSAM OPEN failed with the indicated ACB error-code.

**Severity:** 8 (error) if error is greater than or equal to 128; otherwise, 4 (warning)

**System Action:** Processing terminates if the error code is greater than or equal to 128; otherwise, processing continues normally.

**User Response:** Notify the system programmer.

**System Programmer Response:** Follow standard VSAM diagnostic procedure. Refer to *DFSMS/MVS: Macro Instructions for Data Sets*. See also *MVS/DFP V3R3 Diagnosis Guide* for more information about the VSAM procedures.

---

**DSNJ995I**  
`csect-name` VSAM PUT ERROR, RPLERREG = return-code, RPLERRCD = reason-code

**Explanation:** VSAM PUT failed with the indicated return-code and reason-code.

**Severity:** 8 (error)

**System Action:** Processing terminates.

**User Response:** Notify system programmer.

**System Programmer Response:** Follow standard VSAM diagnostic procedure. Refer to *DFSMS/MVS: Macro Instructions for Data Sets*. See also *MVS/DFP V3R3 Diagnosis Guide* for more information about the VSAM procedures.

---

**DSNJ996I**  
`csect-name` LOG PREFORMAT COMPLETED SUCCESSFULLY, nn RECORDS FORMATTED

**Explanation:** The active log data set has been preformatted successfully. 'nn' records (or VSAM control intervals) have been formatted.

**Severity:** 0 (informational)

---

**DSNJ997I**  
`csect-name` LOG PREFORMAT TERMINATED

**Explanation:** Preformatting of the active log data set did not complete successfully.

**Severity:** 8 (error)

**System Action:** Processing terminates.

**User Response:** Examine other error messages associated with this job.

---

**DSNJ998I**  
`csect-name` LOG DATA SET IS NOT A VSAM DATA SET

**Explanation:** The input log dataset is not a VSAM data set.

**Severity:** 8 (error)

**System Action:** Processing terminates.

**User Response:** Use the AMS IDCAMS Service to define the active log data set as a VSAM Linear data set.

---

**DSNJ999I**  
`csect-name` LOG DATA SET NAME = data-set-name

**Explanation:** The indicated data-set-name is to be preformatted.

**Severity:** 0 (informational)

---

**DSNJ999II**  
`csect-name` LOG DATA SET IS NOT EMPTY

**Explanation:** The input log data set is not an empty data set. The input data set must be empty to prevent the loss of actual log data.

**Severity:** 8 (error)

**System Action:** Processing terminates.

**User Response:** Use the AMS IDCAMS Service to delete and redefine the active log data set or correct the input log data set name.
DSNL... Messages

**DSNL001I** DDF IS ALREADY STARTED

**Explanation:** The distributed data facility (DDF) was already active when you issued -START DDF command.

**System Action:** The issued command is not executed.

**DSNL002I** DDF IS ALREADY STOPPED

**Explanation:** The distributed data facility (DDF) had already been stopped when the -STOP DDF command was issued.

**System Action:** The issued command is not executed.

**DSNL003I** DDF IS STARTING

**Explanation:** The distributed data facility (DDF) -START command is starting.

**System Action:** DB2 begins processing the -START DDF command.

**DSNL004I** csect DDF START COMPLETE LOCATION locname LU netname.luname GENERICLU netname.gluname DOMAIN domain TCPPORT tcpport RESPORT resport

**Explanation:** The distributed data facility (DDF) started.

- **locname**
  
  The LOCATION of the DB2 subsystem.

- **netname.luname**
  
  The fully qualified LU name for the DB2 subsystem.

- **netname.gluname**
  
  The fully qualified VTAM generic LU name for the DB2 subsystem. The value '-NONE' indicates that no VTAM generic LU name is used by the DB2 subsystem.

- **domain**
  
  For non-data sharing systems, domain is the name returned by the DNS for the system's default IP address. For data sharing systems, domain is the name that represents the DB2 group. For the remote DB2 data sharing group, the DRDA requester should use a domain name of the following form:

  - **location.sysplex.domainname**

  where **location** is the DB2 location name, **sysplex** is the sysplex name in the COUPLExx parmlib member and **domainname** is the domain name specified in the TCPIP.DATA file. If you are an MVS requester, the domain name is specified in column IPADDR of catalog table SYSIBM.IPNAMES. If you are a DB2 Connect requester, the CATALOG TCPIP NODE command (or the equivalent command for your environment) is used to specify the TCP/IP domain name. The value ' -NONE ' indicates that TCP/IP is not supported, or TCP/IP initialization failed.

- **tcpport**
  
  The TCP/IP port number used by this DB2 subsystem to accept incoming DRDA connection requests.

  - A zero indicates TCP/IP is not supported. The BSDS DDF record is not configured with a PORT.

**DSNL005I** DDF IS STOPPING

**Explanation:** The distributed data facility (DDF) -STOP command has been initiated.

**System Action:** The -STOP DDF command is initiated.

**DSNL006I** DDF STOP COMPLETE

**Explanation:** The distributed data facility (DDF) -STOP command has completed.

**System Action:** The DDF has stopped.

**DSNL007I** DDF IS ABNORMALLY TERMINATING

**Explanation:** Abnormal termination of the distributed data facility (DDF) has started.

**System Action:** Abnormal termination of the DDF is starting.

**DSNL008I** DDF ABNORMAL TERMINATION COMPLETE

**Explanation:** Abnormal termination of the distributed data facility (DDF) has completed.

**System Action:** The DDF has stopped.

**DSNL009I** INVALID DDF THREAD logical-unit-of-work-id SPECIFIED

**Explanation:** No distributed transaction with the specified 'logical-unit-of-work-id' exists.

**System Action:** The specified thread is not canceled.

**User Response:** Determine the correct 'logical-unit-of-work-id' of the distributed thread that is to be canceled and then reissue the command.

**Problem Determination:** Determine the correct value. The -DISPLAY THREAD command can be used to display all distributed activity.
**DSNL010I**  DDF THREAD logical-unit-of-work-id HAS BEEN CANCELED

**Explanation:** The distributed data facility (DDF) thread ‘logical-unit-of-work-id’ was canceled.

If ‘logical-unit-of-work-id’ is an LUWID (LU network name and an LUWID instance number) instead of an LUWID TOKEN, then in rare circumstances more than one DDF thread might be canceled.

This situation only arises when an application accesses the same DB2 server by different access paths (for example, A->B->C and A->D->C). In such a case, multiple threads with the same LUWID exist at the server (for example, C). If CANCEL DDF THREAD is issued at the server specifying this LUWID, every thread at the server with the LUWID is canceled.

**System Action:** The specified thread is canceled.

---

**DSNL011I**  VTAM STOPPING DDF

**Explanation:** The operator issued a HALT NET command to terminate VTAM.

**System Action:** The distributed data facility (DDF) -STOP command is initiated.

---

**DSNL012I**  VTAM TERMINATING DDF

**Explanation:** The operator issued a HALT NET QUICK command or a HALT NET CANCEL command, or VTAM is terminating abnormally. This message can be issued any time after -START DDF and occurs when VTAM is stopped, which can occur prior to DDF termination. This message is not issued when DDF terminates normally.

**System Action:** Termination of the distributed data facility is initiated.

---

**DSNL013I**  VTAM OPEN ACB FAILED ERROR=error-code

**Explanation:** VTAM returned a nonzero return code after DB2 invoked the OPEN ACB macro instruction during termination of the distributed data facility (DDF). VTAM return codes for OPEN error conditions are defined in VTAM for MVS/ESA Programming.

**System Action:** Termination of the distributed data facility is initiated.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Determine the cause of the failure, fix the error condition, and issue the -START DDF command.

**Problem Determination:** Refer to VTAM for MVS/ESA Programming for failure analysis during an OPEN macro instruction.

---

**DSNL014I**  VTAM CLOSE ACB FAILED ERROR=error-code

**Explanation:** VTAM returned a nonzero return code after DB2 invoked the CLOSE ACB macro instruction during termination of the distributed data facility (DDF). VTAM return codes for CLOSE error conditions are defined in VTAM for MVS/ESA Programming.

**System Action:** Termination of DDF continues.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Determine the cause of the failure, fix the error condition, and then issue the -START DDF command.

**Problem Determination:** Refer to VTAM for MVS/ESA Programming for failure analysis during a CLOSE macro instruction.

---

**DSNL015I**  VTAM SETLOGON FAILED RTNCD=error-code FDBK2=open-flags

**Explanation:** VTAM returned a nonzero return code after DB2 invoked the SETLOGON macro during initialization of the distributed data function (DDF). VTAM return codes are defined in VTAM for MVS/ESA Programming.

**System Action:** Termination of the DDF is started.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Refer to VTAM for MVS/ESA Programming to determine the cause of the failure. After the error is fixed, issue the -START DDF command.

---

**DSNL016I**  DDF RECORD NOT FOUND IN BSDS

**Explanation:** DDF cannot find the DDF communication record in the BSDS.

**System Action:** DDF termination process is initiated.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Use the change log inventory to add the DDF communication record to the BSDS.

**Problem Determination:** Collect the following diagnostic item:

- Print the contents of the BSDS using the print log map utility.

---

**DSNL017I**  INVALID DDF RECORD FOUND IN BSDS

**Explanation:** A invalid or incomplete DDF communication record was found in the BSDS.

**System Action:** DDF termination process is initiated.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Use the change log inventory to add a valid DDF communication record to the BSDS.

**Problem Determination:** Collect the following diagnostic item:

- Print the contents of the BSDS using the print log map utility.

---

**DSNL018I**  VSAM ERROR READING DDF RECORD IN BSDS RPLERRCD=error-code

**Explanation:** A VSAM GET command was issued that resulted in a nonzero return code. RPLERRCD ‘error-code’ is the VSAM return code.

**System Action:** Termination of the distributed data facility (DDF) is initiated.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Determine the cause of the failure, fix the error condition, and issue the -START DDF command.

The cause of the failure is dictated by the VSAM return code. The BSDS may have to be recovered by using a backup copy.
Problem Determination:  Refer to the appropriate VSAM publications.

**DSNL019I** VTAM DOES NOT SUPPORT APPC FUNCTIONS

Explanation:  The installed release of VTAM does not support the advanced program-to-program communications (APPC) application program interface (API).  The APPC API bit is not set in the VTAM function-list vector in the access-method-support vector list.

System Action:  Termination of the distributed data facility (DDF) is initiated.

Operator Response:  Notify the system programmer.

System Programmer Response:  Determine whether the installed release of VTAM supports the APPC API.  If VTAM does not support the APPC API, a VTAM release that supports the APPC API must be installed before the DDF can be started.

**DSNL020I** KEYWORD 'THREAD' PARAMETER parameter FORMAT IN ERROR

Explanation:  The parameter value specified for the logical-unit-of-work ID on the CANCEL DDF THREAD has an invalid format.  The correct form is 'netid.luname.luwnique', where:

- netid  A 1- to 8-character network ID.
- luname  A 1- to 8-character luname.
- luwnique  A 12-character hex number.

Luname and luwnique are separated by a '.' delimiter.  Netid is optional.  If netid is specified, then netid and luname are separated by a '.' delimiter.  If netid is not specified, then the '.' delimiter before luname is not present.

System Action:  The specified thread is not canceled.

User Response:  Determine the correct logical-unit-of-work ID of the distributed thread that is to be canceled and reissue the command.

Problem Determination:  Determine the correct value.  The -DISPLAY THREAD command can be used to display all distributed activity.

**DSNL021I** command IS ACCEPTED

Explanation:  The 'command' command has been accepted and asynchronous processing of 'command' has initiated.  The command can only be -START or -STOP the distributed data facility.

System Action:  The command was accepted and asynchronous processing has been initiated.

**DSNL022I** csect-name DDF THREAD logical-unit-of-work-id WAS PREVIOUSLY CANCELED

Explanation:  A command to cancel the distributed data facility (DDF) thread logical-unit-of-work-id was previously issued.  Either the CANCEL DDF THREAD or the CANCEL THREAD command was entered.  The thread is currently being canceled.  The CANCEL command terminates a thread only if the thread is processing in DB2 or is currently suspended by DB2.  The thread might not be processing in DB2 in these situations:

- The thread is processing in the application and has not made a request to DB2.  The DISPLAY THREAD command indicates this.
- The user placed the thread on an MVS resource using the ENQUE command.  The CANCEL command has no effect on the thread until ENQUE completes and the thread returns to DB2.
- The thread is processing in VTAM and is waiting for a response from a partner.  The DISPLAY THREAD DETAIL command indicates this.  In this case the thread does not terminate until VTAM returns to DB2.  VTAM commands, which will terminate the session or LU, can be used to cause VTAM to return to DB2.

**DSNL023I** DDF IS ALREADY IN THE PROCESS OF STARTING

Explanation:  The distributed data facility (DDF) was starting when the -START DDF or -STOP DDF command was issued.

System Action:  The issued command is not executed.

**DSNL024I** DDF IS ALREADY IN THE PROCESS OF STOPPING

Explanation:  The distributed data facility (DDF) was stopping when the -STOP DDF or -START DDF command was issued.

System Action:  The -START or -STOP DDF command is not executed.

**DSNL025I** A DISTRIBUTED AGENT FOR luw-id=token EXISTS AT THIS LOCATION BUT NOT AT SITE WITH LOCATION location AND LU luname

Explanation:  The DDF error monitor has detected that a distributed agent exists at this location but not at the named partner location.

Where

- luw-id=token  The logical unit of work ID of the thread followed by an '=' sign and a token which may be used in place of 'luw-id' in any DB2 command that accepts 'luw-id' as input.
- location  The location name of the partner site where a thread with the same 'luw-id' does not exist.
- luname  The 8-character LUNAME of the partner location.

Operator Response:  Determine if the inconsistency is due to network conditions or a DB2 error.  If a DB2 error is suspected, acquire documentation to diagnose the problem.

1. Console dump of DB2 address spaces (ssnmDBM1, ssnmMSTR, ssnmDIST), VTAM, and user's address space at the requesting site.
2. Console dump of DB2 address spaces (ssnmDBM1, ssnmMSTR, ssnmDIST), and VTAM at the server site.
3. SYSLOG from requesting and server sites.
4. LOGREC from requesting and server sites.

If an indefinite inconsistency is suspected, use the CANCEL DDF THREAD command to terminate the thread.  If CANCEL DDF THREAD fails to terminate the agent, use VTAM commands to terminate the thread conversations.
Problem Determination: Use the DB2 DISPLAY THREAD command with DETAIL option at each DB2 subsystem to display information about the agent and its conversations. Use VTAM commands to display additional information about the conversations being used by the thread and also about network conditions.

Collect the following diagnostic items listed in Appendix B, "Problem determination on page 1051": 1, 3, 5.

DSNL026I luw-id=token APPEARS TO BE SUSPENDED PARTNER LOCATION location PARTNER LU luname

Explanation: The DDF error monitor has detected that a distributed agent with the specified 'luw-id' at this location and at the named partner 'location' may be suspended indefinitely.

Where

luw-id=token The logical-unit-of-work ID of the thread followed by an '=' sign and a token which may be used in place of 'luw-id' in any DB2 command that accepts 'luw-id' as input.

location The location name of the partner site where a thread with the same 'luw-id' exists.

luname The 8-character LUNAME of the partner location.

Operator Response: Determine if the inconsistency is due to network conditions or a DB2 error. If a DB2 error is suspected, acquire documentation to diagnose the problem.

1. Console dump of DB2 address spaces (ssnmDBM1, ssnmMSTR, ssnmDIST), VTAM, and hung user's address space at the requesting site.
2. Console dump of DB2 address spaces (ssnmDBM1, ssnmMSTR, ssnmDIST), and VTAM as the server site.
3. SYSLLOG from requesting and server sites.
4. LOGREC from requesting and server sites.

If an indefinite inconsistency is suspected, use the CANCEL DDF THREAD command to terminate the thread. If CANCEL DDF THREAD fails to terminate the agent, use VTAM commands to terminate the thread conversations.

Problem Determination: Use the DB2 DISPLAY THREAD command with DETAIL option at each DB2 subsystem to display information about the agent and its conversations. Use VTAM commands to display additional information about the conversations being used by the thread and also about network conditions.

Collect the following diagnostic items listed in Appendix B, "Problem determination on page 1051": 1, 3, 5.

DSNL028I luw-id=token ACCESSING DATA preposition LOCATION location nettype netvalue

Explanation: This message follows DSNL027I and identifies a remote location where work might have been occurring for the distributed thread. This message is informational and with the DSNL027I message identifies a remote location where diagnostic information might have to be collected.

Where

luw-id=token The logical-unit-of-work ID of the thread followed by an '=' sign and a token which may be used in place of 'luw-id' in any DB2 command that accepts 'luw-id' as input.

nettype netvalue The network type and network value.

Problem Determination: Gather appropriate diagnostic information (refer to the System Programmer Response section of the abend reason code specified in this message if applicable). Refer to DSNL028I message(s) for the names of the other location(s).

Problem Determination: Use the DB2 DISPLAY THREAD command with DETAIL option at each DB2 subsystem to display information about the agent and its conversations. Use VTAM commands to display additional information about the conversations being used by the thread and also about network conditions.

Collect the following diagnostic items listed in Appendix B, "Problem determination on page 1051": 1, 3, 5.
Problem Determination: See message DSNL027I.

DSNL029I DDF IS NOT INITIALIZED

Explanation: A -START DDF or -STOP DDF command was issued before DDF was initialized during DB2 startup processing.

Operator Response: Wait for the DSN029I "START DB2" NORMAL COMPLETION message and re-issue the command.

DSNL030I csect-name DDF PROCESSING FAILURE FOR LUWID=luwid AUTHID=authid REASON=reason

Explanation: A requesting conversation was terminated because of DDF processing failure. The requesting agent is identified by the ‘luwid’ and ‘authid’ values, if they are available. If the authorization ID is not available, the value ‘-UNKNOWN’ will be displayed. If the ‘luwid’ is not available, the string ‘netid.luname.00000000000000’ will be displayed, describing the LU that made the request.

The reason code in this message describes the nature of the DDF processing failure.

System Action: The system will eventually abend the database access agent.

Operator Response: Notify the system programmer for analysis.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Inspect the reason code and determine if the system is operating as expected. Collect the following diagnostic items listed in Appendix B, “Problem Determination” on page 1051, 1, 2, 5.

DSNL031I csect-name DRDA EXCEPTION CONDITION IN RESPONSE FROM SERVER LOCATION=location FOR THREAD WITH LUWID=luwid REASON=reason code ERROR ID=module name and source id CORRELATION ID=correlation id CONNECTION ID=connection id IFCID=ifcid SEE TRACE RECORD WITH IFCID=ifcid SEQUENCE NUMBER=seq-no

Explanation: A DRDA exception condition was detected in response data returned from the application server (AS) with location name location.

A DRDA exception condition, detected at the application requester, is one of the following:

- An error reply message and severity code received from the server.
- A parsing error detected while processing a reply message or reply data object
- A DRDA protocol violation, (for example, an object returned that is not valid for this command).

The variables have the following meanings:

- luwid: The logical unit of work (LUW) ID that identifies the thread and is also included in the trace record.
- reason: The DB2 reason code for this specific error.
- error id: The module name concatenated with a 4-byte source id that uniquely determines the source within the module where the exception is encountered.
- correlation-id: The correlation identifier of the thread that detected the DRDA exception condition. Correlation-IDs begin with ‘0nn’, where nn is a number from 01 to 28, identify system agents.
- connection-id: The connection name of the thread that detected the DRDA exception condition.
- ifcid: The IFCID number of the trace record that was written.
- seq-no: The IFCID sequence number associated with the trace record. The trace record contains information that can be used to determine what caused the DRDA exception condition, and is written to statistics class 4. Statistics class 4 is directed to SMF by default during DB2 installation, and must be directed to a permanent destination (SMF or GTF) for the trace record to be accessible. The message and the trace record are only written the first time an error is detected. This avoids flooding the console and the trace. The sequence number is printed in hexadecimal.

If the sequence number is zero this has been caused by one of two conditions:

- statistics class 4 was not directed to a permanent destination
- statistics class 4 was directed to the resident trace table as its permanent destination.

If this message first occurred because statistics class 4 was not directed to a permanent destination, then the same message recurs later (along with trace record) when the statistics class is directed to the resident table as its permanent destination instead of SMF or GTF.

System Action: An alert was generated. Additionally, the system wrote a trace record with IFCID=ifcid to statistics class 4 that can be used to diagnose the problem.
Problem Determination: Determine the destination of statistics class 4 and locate and print the trace record with SEQUENCE NUMBER=seq-no. The reason code is described in "Section 4. DB2 Codes" on page 577. The description of the reason code can be used in conjunction with the publication Distributed Relational Database Architecture Reference to determine the type of DRDA exception that has been detected. Use the procedures described in Section 5 of DB2 Diagnosis Guide and Reference to determine the problem and which system is responsible.

DSNL032I  csect-name DRDA EXCEPTION CONDITION IN REQUEST FROM REQUESTER
LOCATION=location FOR THREAD WITH
LUWID=luwid/REASON=reason code ERROR
ID=module_name and source id IFCID=ifcid SEE
TRACE RECORD WITH IFCID SEQUENCE
NUMBER=seq-no

Explanation: A DRDA exception condition was detected while processing a command or command data received from the application requester (AR) with location name location. A DRDA exception condition, detected at the application server (AS), is a parsing error detected while processing a command or a command data object.

location This field contains one of the following:
- The requester's relational database name (location name)
- The requester's VTAM LU name (<luname>)
- The requester's dotted decimal IP address (nnn.nnn.nnn.nnn)

luwid The logical unit of work (LUW) ID that identifies the thread and is also included in the trace record, or 'NETID.LUNAME.000000000000' if the error detected involves an invalid FMH5.

reason The DB2 reason code for this specific error.

error id The module name concatenated with a 4-byte source id that uniquely determines the source within the module where the exception was encountered.

ifcid The IFCID sequence number associated with the trace record. The trace record contains information that can be used to determine what caused the DRDA exception condition, and is written to statistics class 4. Statistics class 4 is directed to SMF by default during DB2 installation, and must be directed to a permanent destination (SMF or GTF) for the trace record to be accessible. The message and the trace record are only written the first time an error is detected. This avoids flooding the console and the trace. The sequence number is printed in hexadecimal.

If the sequence number is zero this has been caused by one of two conditions:
- statistics class 4 was not directed to a permanent destination
- statistics class 4 was directed to the resident trace table as its permanent destination.

If this message first occurred because statistics class 4 was not directed to a permanent destination, then the same message recurs later (along with trace record) when the statistics class is directed to the resident table as its permanent destination instead of SMF or GTF.

System Action: An alert was generated and the system wrote a trace record with IFCID=ifcid to statistics class 4 that can be used to diagnose the problem.

Operator Response: Notify the system programmer for analysis.

System Programmer Response: Determine the destination of statistics class 4 and locate and print the trace record with SEQUENCE NUMBER=seq-no. The reason code is described in "Section 4. DB2 Codes" on page 577. The description of the reason code can be used in conjunction with the publication Distributed Relational Database Architecture Reference to determine the type of DRDA exception that has been detected. Use the procedures described in DB2 Diagnosis Guide and Reference to determine the problem and which system is responsible.

DSNL033I  csect-name DDF TERMINATION SCHEDULED DUE TO DETECTION OF ABEND abend
REASON reason

Explanation: A severe error was detected during DDF processing. DDF processing can no longer continue so DDF termination has been scheduled. 'Csect-name' is the DB2 module that detected the condition and requested DDF termination.

The abend and reason may also contain additional information about the cause.

abend The abend code or zeros if no abend is associated with the termination of DDF.
- The abend was a DB2 04E abend, the reason code will contain additional information about the abend.

reason The DB2 reason code or zeros if no DB2 reason code is associated with the termination of DDF.
- If no abend is associated with the problem, the reason code describes the cause for the termination.

System Action: Termination of the distributed data facility (DDF) is initiated.

Operator Response: Notify the system programmer for analysis.

System Programmer Response: Determine the cause of the failure. Correct the condition and restart DDF using the -START DDF command.

Problem Determination: If an abend is associated with the failure, a dump may have been provided. LOGREC will also contain information about the abend.

DSNL034E DDF CANNOT BE STARTED BECAUSE OF BSDS INCONSISTENCIES, ORIGINAL LUNAME=luname1, BSDS LUNAME=luname2, ORIGINAL LOCATION=location1, BSDS LOCATION=location2

Explanation: The LUNAME or the LOCATION name stored in the bootstrap data set (BSDS) was changed since the distributed data facility (DDF) was last started, but DDF still has resynchronization responsibility with one or more partner logical units using the old LUNAME and LOCATION name. Both the original and current BSDS values of LUNAME and LOCATION name are displayed.
DSNL035I  DDF CANNOT BE STOPPED BECAUSE AN INDOUBT DATA BASE ACCESS THREAD EXISTS

Explanation:  DDF is the connection manager for a database access thread (DBAT) that is indoubt. A STOP DDF MODE(QUIESCE) command is rejected until the indoubt logical unit of work is resolved.

System Action:  DDF is not stopped.

Operator Response:  Inform the database administrator.

Database Administrator Action:  You have the following options:

- Wait for automatic resynchronization to be performed.
  When this occurs, either message DSNL407I or DSNL415I is displayed.

  After the indoubt thread is resolved, reissue the STOP DDF command.

- Use the DISPLAY THREAD TYPE(INDOUBT) command to find the LOCATION that has coordinator responsibility for the indoubt LUW. Contact that location and determine whether the LUW committed or aborted. Then use the RECOVER INDOUBT command to cause the indoubt DBAT to be resolved with the same decision.

  After the indoubt thread is resolved, reissue the STOP DDF command.

- Issue the STOP DDF MODE(FORCE) command. The indoubt thread remains indoubt and can be resolved by using automatic resynchronization after DDF is started again, or it can be resolved manually as described above.

DSNL036I  DDF THREAD logical-unit-of-work-id SPECIFIED IS INDOUBT

Explanation:  A database access thread that is indoubt cannot be canceled by using the -CANCEL DDF THREAD command.

System Action:  The specified thread is not canceled.

Operator Response:  Use the -DISPLAY THREAD TYPE(*) command to display all distributed activity.

DSNL037I  csect-name RESET GENERICLU lu SUCCESSFUL

Explanation:  The RESET GENERICLU command successfully purged the VTAM sysplex information from shared memory.

lu  The value supplied on the RESET GENERICLU command

System Action:  The VTAM information contained in the sysplex shared memory for the indicated LU is purged.

DSNL038E  csect-name RESET GENERICLU lu FAILED DUE TO VTAM RTNCD=xx and FDB2=yy

Explanation:  The VTAM CHANGE,OPTCD=(SYN,ENDAFFIN) macro returned an unexpected return code, which is described by the indicated VTAM RTNCD and FDB2 values.

lu  The value supplied on the RESET GENERICLU command

xx  The hexadecimal value of the VTAM RTNCD field

yy  The hexadecimal value of the VTAM FDB2 field

System Action:  VTAM was not able to purge the sysplex shared memory information for the indicated LU.

System Programmer Response:  Refer to VTAM for MVS/ESA Programming for the meaning of the VTAM RTNCD and FDB2 values.

DSNL039E  csect-name RESET GENERICLU lu FAILED DUE TO ACTIVE VTAM SESSIONS

Explanation:  The RESET GENERICLU command was not accepted because one or more active VTAM sessions exist to the indicated LU. All VTAM sessions must be terminated before the command is accepted.

lu  The value supplied on the RESET GENERICLU command

System Action:  The command is rejected.
**System Programmer Response:** Terminate the VTAM sessions to the remote LU and reissue the -RESET GENERICLU command.

**DSNL040E csect-name RESET GENERICLU lu FAILED DUE TO INDOUBT RESOLUTION INFORMATION**

**Explanation:** The RESET GENERICLU command was not accepted because information is currently being retained for resolution of indoubt threads for the indicated partner LU. The DISPLAY THREAD TYPE(INDOUBT) command can be used to view this information.

*lu*  The value supplied on the RESET GENERICLU command

**System Action:** The command is rejected.

**System Programmer Response:** Make sure that all indoubt threads at the remote site are resolved before issuing the RESET GENERICLU command.

When DB2 performs automatic indoubt thread resolution, the information contained in the DISPLAY THREAD TYPE(INDOUBT) display is purged at the end of the resynchronization process.

If required, use the -RESET INDOUBT command to manually purge the indoubt resolution information.

**DSNL041E csect-name DB2 GENERIC LU NAME REQUESTED, BUT REQUIRED VTAM LEVEL IS NOT INSTALLED**

**Explanation:** The DB2 GENERIC LUNAME installation option was specified. This option requires VTAM Version 4 Release 2 or a later release.

**System Action:** The DB2 GENERIC LUNAME installation option is ignored.

**System Programmer Response:** If the DB2 GENERIC LUNAME is required, install VTAM Version 4 Release 2 or a later release.

**DSNL042E csect-name DB2 SYSPLEX TP WAS INVOKED BY LU lu, BUT REQUIRED MVS LEVEL IS NOT INSTALLED**

**Explanation:** A request for the DB2 syplex transaction program (TP) was received by a DB2 server that is a member of a data sharing group. The DB2 syplex TP is used by the requesting systems to determine which DB2 systems within the group are currently available for DDF conversations.

The DB2 syplex TP uses Work Load Manager (WLM) functions in MVS Version 5 Release 2 or a later release to balance distributed workload among the DB2 systems in the group. Because the required MVS release is not installed or DB2 is not registered with WLM, the DB2 syplex TP is not able to provide the requested information.

*lu*  The name of the LU in the network that invoked the DB2 syplex TP

**System Action:** The DB2 syplex TP returns the NETID.LUNAME of the local DB2 system as the only available DB2 server in the group. The requester is not provided the names of other DB2 systems in the group, so all sessions from the requester are routed to the local DB2 server.

**System Programmer Response:** Install MVS Version 5 Release 2 or a later release if you want to have the DB2 syplex TP return multiple NETID.LUNAME values to the requester or refer to the DSNL044I on why DB2 could not register with WLM.

**DSNL043I csect-name RESET GENERICLU luname INVALID**

**Explanation:** The luname value specified is invalid. The correct format is either a

*lu*  The name of the LU in the network that invoked the DB2 syplex TP

1. 1 to 8 character luname, or
2. 1 to 8 character network ID, a period, and a 1 to 8 character luname.

**System Action:** The parameter is ignored. Processing continues with the next luname, if any.

**User Response:** Determine the correct luname and reissue the command.

**DSNL044I csect-name MVS macname MACRO FAILED WITH RETCODE=xx AND RSNCODE=yy**

**Explanation:** An MVS Workload Manager (WLM) macro returned an unexpected return code, which is described by the indicated RETCODE and RSNCODE values. DDF uses MVS Workload Manager macros to obtain data sharing syplex routing information for incoming DDF work requests, and to establish an MVS enclave for the execution environment of the distributed thread.

*macname*  The name of the MVS macro that returned the unexpected return code. The possible values are:

1. IWMSRSRG: Register with WLM for syplex routing.
2. IWMSRSRS: Request syplex routing information.
3. IWMSRDRS: Deregister with WLM for syplex routing.
4. IWMECREA: Create enclave.

*xx*  The hexadecimal value of the MVS RETCODE field.

*yy*  The hexadecimal value of the MVS RSNCODE field.

**System Action:** If a syplex routing macro failed, then syplex routing may not be performed in which case, all SQL statements received from the client will be processed by this DB2 subsystem. If an enclave macro failed, the distributed thread may not be able to execute in an MVS enclave, however the distributed thread will continue to execute as an MVS SRB.

**System Programmer Response:** Refer to MVS/ESA Programming: Workload Management Services for the meaning of the MVS RETCODE and RSNCODE values.
**DSNL050E**  

csect-name DB2 ENCOUNTERED AN ERROR WHILE DOING DCE-RELATED PROCESSING.  
ERROR ID=errid RETURN STATUS=major (MINOR=minor) FUNCTION=function-name

**Explanation:**  
DB2 has received a CONNECT request from a DRDA requester that requires DCE authentication. DDF encountered an error in performing the DCE-related functions required to complete the request. The FUNCTION field contains the name of the function being performed. RETURN STATUS and MINOR may contain additional information about the error, depending on the ERROR ID.

The FUNCTION name may be one of the following:

**ENROLL_DB2**  
A set of DCE operations performed to enroll DB2 as a DCE-based server. Message DSNL051 was also issued for this error.

**ACCEPT_PRINCIPAL**  
A set of DCE and RACF operations performed to accept DCE security tokens from a DCE user and to derive the corresponding RACF user ID for that user. Message DSNL052 was also issued for this error.

The ERROR ID may be one of the following:

**20301** DDF is unable perform DCE-related processing.

**20302** The current cell size is not large enough to process the function. RETURN STATUS and MINOR contain serviceability information.

**20303** DDF issued the MVS CPOOL macro to get a cell from its cell pool for DCE-related processing but the CPOOL operation failed. RETURN STATUS contains the MVS system code returned by the MVS CPOOL macro and MINOR contains the associated reason code. For example, RETURN STATUS of '0000C78' is the C78 system code. Refer to OS/390 MVS System Codes for an explanation and a description of relevant reason codes.

**20304** DCE working storage could not be acquired.

**20305** DDF received more connection requests requiring DCE authentication than it could handle concurrently.

**System Action:**  
The connection request is terminated. Other messages may also have been issued.

It may be necessary to stop and restart DDF to correct the problem. If this is the case and it is not possible to do so immediately, all other DDF activity not requiring DCE services will process normally.

**User Response:**  
Attempt the connection request again. If the connection request fails for the same reason, contact the system programmer.

**System Programmer Response:**  
Take the actions indicated for the following errors:

**20301** Refer to DSNL057 for further information and corrective actions.

**20302** DDF preallocates fixed-sized storage cells large enough to accommodate the largest expected DCE authentication request. This request exceeds this amount. This connection request cannot be processed, although other requests requiring less storage will continue to be processed. Report this problem as a DDF internal error.

To process this request, DDF can be stopped and restarted; DDF will automatically allocate a larger cell size. When DB2 is stopped, however, the cell size reverts to the default.

**20303** Refer to the RETURN STATUS and MINOR to understand the CPOOL macro failure. It may be necessary to stop and restart DDF to clear the problem. If the problem persists, report the problem.

**20304** Retry the connection request. If the error persists, report the problem.

**20305** The number of concurrent DCE authentication requests allowed is 4096. Retry the connection request.

If you suspect an error in DB2, refer to Section 3 of **DB2 Diagnosis Guide and Reference** on identifying and reporting the problem.

**Problem Determination:**  
Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051, 1, 4, 5.

---

**DSNL051E**  

csect-name DB2 ENCOUNTERED AN ERROR WHILE ENROLLING UNDER ITS LOCATION NAME=locname TO USE OS/390 DCE SERVICES. ERROR ID=errid RETURN STATUS=major (MINOR=minor)

**Explanation:**  
DB2 has received a CONNECT request from a DRDA requester that requires DCE authentication. Before it can complete this request, DDF must first be enabled for DCE-related processing. If DDF has not completed all enablement functions when a CONNECT request is received, it automatically attempts to perform the uncompleted functions.

DDF was not enabled for DCE-related processing when it received this CONNECT request. One of the uncompleted functions was to enroll with DCE. This function registers DB2's location name as a server principal capable of accepting DCE security tokens. An error occurred while performing this function.

LOCATION NAME is the location name for the DB2 system.

For ERROR IDs greater than 20000, message DSNL050E was also issued and describes the ERROR ID listed.

**ERROR IDs less than 20000 may be one of the following:**

**101** gss_import_name failed

**102** gssdce_register_acceptor_identity failed

The RETURN STATUS contains error information about the function that failed. The RETURN STATUS contains OS/390 DCE return information that is described in **OS/390 DCE Messages and Codes**.

**System Action:**  
DDF cannot complete the processing that enable it to perform DCE-related operations. DSNL056 is also issued to the console.

It may be necessary to stop and restart DDF to correct the problem. If this is the case and it is not possible to do so immediately, all other DDF activity not requiring DCE services will process normally.

**System Programmer Response:**  
Verify that DCE is operational. If it is not, correct the problem. Refer to DSNL054 and DSNL056 for additional information.
If DCE is operational, determine the reason `locname` cannot be enrolled by examining the RETURN STATUS and MINOR codes.

- Contact the DCE security administrator to determine if `locname` is a valid principal in the DCE security registry.
- Contact the RACF security administrator to determine if `locname` is a valid OMVS user.

If `locname` has not been properly defined to DCE and RACF security, then correct the problem. Refer to DSNL056 for additional information.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051, 1, 4, 5.

---

**DSNL052E**

`csect-name` **DB2 ENCOUNTERED AN ERROR WHILE ATTEMPTING TO VALIDATE DCE AUTHENTICATION TOKENS FROM A REMOTE USER AT LOCATION=`locname` LUWID=`luwid`

ERROR ID=`errid` RETURN STATUS=`major`

(MINOR=`minor`)  

**Explanation:** DB2 has received a CONNECT request from a DRDA requester that requires DCE authentication. DDF encountered an error in performing one of the operations required to authenticate the DCE user identity or to determine the corresponding RACF user ID.

For ERROR IDs greater than 20000, message DSNL050E was also issued and describes the ERROR ID listed.

**ERROR IDs less than 20000 may be one of the following:**

<table>
<thead>
<tr>
<th>Error Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>201</td>
<td><code>gss_import_name</code> failed</td>
</tr>
<tr>
<td>202</td>
<td><code>gss_acquire_cred</code> failed</td>
</tr>
<tr>
<td>203</td>
<td><code>gss_accept_sec_context</code> failed</td>
</tr>
<tr>
<td>204</td>
<td><code>gss_display_name</code> failed</td>
</tr>
<tr>
<td>205</td>
<td><code>gssdce_extract_creds_from_sec_context</code> failed</td>
</tr>
<tr>
<td>206</td>
<td><code>sec_cred_get_initiator</code> failed</td>
</tr>
<tr>
<td>207</td>
<td><code>sec_cred_get_pa_data</code> failed</td>
</tr>
<tr>
<td>208</td>
<td><code>uuid_to_string</code> failed</td>
</tr>
<tr>
<td>209</td>
<td><code>uuid_to_string</code> failed</td>
</tr>
<tr>
<td>210</td>
<td><code>convert_id_np</code> failed</td>
</tr>
</tbody>
</table>

The RETURN STATUS contains error information about the function that failed. For all ERROR IDs except 210, the RETURN STATUS contains OS/390 DCE return information that is described in OS/390 DCE Messages and Codes. If MINOR is provided, it contains the DCE minor code.

For ERROR ID 210, RETURN STATUS contains an errno described in IBM C/C++ for MVS/ESA Library Reference. MINOR contains errno2 information for the operation.

**System Action:** Connection processing terminates.

It may be necessary to stop and restart DDF to correct the problem. If this is the case and it is not possible to do so immediately, all other DDF activity not requiring DCE services will process normally.

**System Programmer Response:** Verify that DCE is operational. If it is not, correct the problem.

If DCE is operational, determine the cause of the failure by examining the return status and minor code.

---

DSNL053I

`csect-name` **DDF COMPLETED DCE-RELATED PROCESSING BUT COULD NOT RELEASE TEMPORARY DCE WORK STORAGE. ERROR ID=`errid` RETURN STATUS=`major`

(MINOR=`minor`) FUNCTION=`function-name`

**Explanation:** DB2 has received a CONNECT request from a DRDA requester that requires DCE authentication. DDF encountered an error in releasing temporary work storage acquired by DCE as part of function processing.

The FUNCTION name may be one of the following:

**ENROLL_DB2**

A set of DCE operations performed to enroll DB2 as a DCE-based server.

**ACCEPT_PRINCIPAL**

A set of DCE and RACF operations performed to accept DCE security tokens from a DCE user and to derive the corresponding RACF user ID for that user.

**ERROR IDs may be one of the following:**

<table>
<thead>
<tr>
<th>Error Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>103</td>
<td><code>gss_release_name</code> failed</td>
</tr>
<tr>
<td>211</td>
<td><code>gss_release_name</code> failed</td>
</tr>
<tr>
<td>212</td>
<td><code>gss_release_name</code> failed</td>
</tr>
<tr>
<td>213</td>
<td><code>gss_release_cred</code> failed</td>
</tr>
<tr>
<td>214</td>
<td><code>gss_delete_sec_context</code> failed</td>
</tr>
<tr>
<td>216</td>
<td><code>rpc_string_free</code> failed</td>
</tr>
<tr>
<td>216</td>
<td><code>rpc_string_free</code> failed</td>
</tr>
<tr>
<td>217</td>
<td><code>gss_release_buffer</code> failed</td>
</tr>
<tr>
<td>218</td>
<td><code>gss_release_buffer</code> failed</td>
</tr>
</tbody>
</table>

The RETURN STATUS contains error information about the operation that failed. The RETURN STATUS contains OS/390 DCE return information that is described in OS/390 DCE Messages and Codes. If MINOR is provided, it contains the DCE minor code.

**System Action:** Connection processing continues. The storage will be recovered when DDF is stopped.

**System Programmer Response:** No action is required. If this error occurs repeatedly and the storage loss appears to be negatively affecting DDF operation, then stop and restart DDF to clear the problem. Report the problem. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051, 1, 4, 5.
csect-name DDF IS BEING ENABLED FOR DCE-RELATED PROCESSING.

Explanation: DB2 has received a CONNECT request from a DRDA requester that requires DCE authentication. To process this request, DDF must first have completed a set of functions that enable it to invoke DCE services. If DDF receives such a CONNECT request and it has not already successfully completed all these functions, it automatically attempts each uncompleted function and issues this message to indicate that processing is in progress.

When DDF has successfully completed all these functions, it issues DSNL055 to indicate that DDF is now enabled for DCE-related processing. Otherwise, it issues DSNL056 to indicate that a failure has occurred.

System Action: DDF completes the functions needed to enable for DCE-related processing. If the functions complete, then DDF continues processing the DRDA connection request.

csect-name DDF HAS BEEN ENABLED FOR DCE-RELATED PROCESSING.

Explanation: DB2 has received a CONNECT request from a DRDA requester that requires DCE authentication. To process this request, DDF must first have completed a set of functions that enable it to invoke DCE services. If DDF receives such a CONNECT request and it has not already successfully completed all these functions, it automatically attempts each uncompleted function and issues DSNL054 to indicate that this processing is in progress.

When DDF has successfully completed all these functions, it issues this message to indicate that DDF is now enabled for DCE-related processing.

System Action: DDF continues processing the DRDA connection request. DDF is now able to process other CONNECT requests requiring DCE authentication.

csect-name DDF COULD NOT BE ENABLED FOR DCE-RELATED PROCESSING. ERROR ID=errid, RETURN STATUS=major (MINOR=minor)

Explanation: DB2 has received a CONNECT request from a DRDA requester that requires DCE authentication. To process this request, DDF must first have completed a set of functions that enable it to invoke DCE services. If DDF receives such a CONNECT request and it has not already successfully completed all these functions, it automatically attempts each uncompleted function. An error has occurred while performing these enabling functions. RETURN STATUS and MINOR may contain additional information, depending on the ERROR ID.

The ERROR ID may be one of the following:

20101 A fatal error has occurred and DDF cannot perform the functions required. See message DSNL057 for additional information.

20102 The OS/390 DCE service routine (EUVQDMC) could not be loaded. Verify that the DCE base services feature has been enabled on your system and that your system is at the OS/390 Release 1 level or higher. If DCE as this level has not been enabled, then DCE authentication cannot be used. Another authentication method should be selected for this user. Refer to the OS/390 MVS System Codes for an explanation and a description of relevant reason codes.

20103 DDF issued the CPOOL macro to build a cell pool for use in DCE-related processing, but the CPOOL request failed. RETURN STATUS contains the MVS system code returned by the MVS CPOOL macro and MINOR contains the reason code. For example, RETURN STATUS of '00000C78' is the C78 system code. Refer to the OS/390 MVS System Codes for an explanation and a description of relevant reason codes.

20104 The OS/390 DCE service routine (EUVQDMC) could not load the module EUVQSAM.

20105 The OS/390 DCE service routine (EUVQDMC) could not attach a task.

20106 The OS/390 DCE service routine (EUVQDMC) had a storage allocation error.

20107 DDF could not enroll with DCE security services as a DCE-based server. See message DSNL051 for error information.

System Action: The connection request is terminated. Other messages may also have been issued.

It may be necessary to stop and restart DDF to correct the problem. If this is the case and it is not possible to do so immediately, all other DDF activity not requiring DCE services will process normally.

User Response: Attempt the connection request again. If the connection request fails for the same reason, contact the system programmer.

System Programmer Response: Take the actions indicated for the following errors:

20101 Refer to DSNL057 for corrective action.

20102 The required module EUVQDMC is located in the DCE library (xxx.SEUVLIB). Verify that the OS/390 DCE feature is enabled on your system. If it is, verify that the DCE library is either in the link list for your system or included in the STEPLIB for the DDF startup procedure (ssnDIST).

If DCE is not enabled on your system, then DCE authentication cannot be used. Another authentication method should be chosen for this user. If DCE is enabled, correct the problem. DDF must be stopped and restarted after the problem is corrected.

20103 DDF preallocates a cell pool for use in processing DCE-related functions. Examine the CPOOL macro code. Refer to those messages for corrective action.

20104 Report this problem to OS/390 DCE as an error involving EUVQDMC.

20105 Report this problem to OS/390 DCE as an error involving EUVQDMC.

20106 Retry the connection request. If the problem persists, stop and restart DDF to clear the problem. DCE message EUVQ00103E has also been issued to the console.

20107 DSNL051 and possibly DSNL050 will also have been issued. Refer to those messages for corrective action.
If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 4, 5.

---

DSNL057I  csect-name  DDF CANNOT PERFORM DCE-RELATED PROCESSING: REASON=reason  FAILURE TOKEN=token

Explanation: DB2 has received a CONNECT request from a DRDA requester that requires DCE authentication but cannot process it because DDF is unable to perform DCE-related functions. REASON explains why this is so. FAILURE TOKEN contains serviceability information.

REASON may be one of the following:

**ERROR**
An error occurred while performing DCE-related processing. DDF is no longer enabled for DCE-related processing.

**DDF-STOPPING**
DDF is stopping. DDF cannot perform DCE-related functions until DDF is started again.

**NOT-ENABLED**
DDF automatically attempts to enable DCE-related processing when it receives a connection request from a DRDA requester requiring DCE authentication. An error has occurred during this processing.

**ENABLE-ERROR**
An unrecoverable error occurred and DDF is unable to perform operations needed to enable DCE-related processing.

**NOT-RESPONDING**
DDF received a previous DRDA CONNECT request requiring DCE authentication and is already performing operations to enable DDF to perform DCE-related functions. That processing may be taking longer than expected or it may have encountered a fatal error. The other requester may be hung.

System Action: The connection request is terminated. Other messages may also have been issued.

It may be necessary to stop and restart DDF to correct the problem. If this is the case and it is not possible to do so immediately, all other DDF activity not requiring DCE services will process normally.

User Response: Attempt the connection request again. If the connection request fails for the same reason, contact the system programmer.

System Programmer Response: Take the actions indicated for the following errors:

**ERROR**
Determine the cause of the failure by examining related console messages, especially DSNL058 to determine if a fatal error has occurred but has not been recovered.

If DSNL059 has been issued, DDF was able to reset from the error and it will automatically attempt to re-enable for DCE-related processing with the next DRDA CONNECT request requiring DCE authentication. No action is required.

**DDF-STOPPING**
No action is required. Wait for DDF to start again and retry the request.

**NOT-ENABLED**
Determine why DDF was not able to enable for DCE-related processing by examining related console messages, especially DSNL056.

**ENABLE-ERROR**
Determine why DDF was not able to enable for DCE-related processing by examining related console messages, especially DSNL056 and DSNL058.

**NOT-RESPONDING**
Determine if DDF processing to enable DCE-related functions is encountering errors by examining console messages (DSNL050-DSNL064). Look for a DSNL054 message that is not paired with a DSNL055 or DSNL056 message. Look for threads that may be hung in DCE processing by issuing the -DISPLAY THREADS(*) LOCATION(*) command and looking for STATUS of RD. If any threads are hung in this manner, it will be necessary to issue -STOP DDF MODE(FORCE) to clear the error.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 4, 5.

---

DSNL058I  csect-name  DDF DISABLED FOR DCE-RELATED PROCESSING. TOKEN=token

Explanation: DDF is disabled for DCE-related processing. Either DDF is being stopped or DDF encountered a fatal error while performing DCE-related operations. The error may have occurred in DDF processing or in DCE processing. TOKEN contains serviceability information.

System Action: If DDF is being stopped, DDF stop processing continues.

If a fatal error has occurred, DB2 attempts to reset itself and allow for future re-enablement. The next DRDA CONNECT request requiring DCE authentication will then trigger operations that re-enable DDF for DCE-related functions. If DDF cannot reset itself or if the enablement operations fail, all DRDA CONNECT requests requiring DCE authentication are rejected.

It may be necessary to stop and restart DDF to correct the problem. If this is the case and it is not possible to do so
immediately, all other DDF activity not requiring DCE services will process normally.

System Programmer Response:  If DDF stop processing is being performed, no action is required.

If a fatal error has occurred, no action is required if the DDF is able to reset itself for future re-enablement. If subsequent DRDA CONNECT requests fail because DDF was not able to re-enable for DCE-related processing, examine messages at the console, especially DSNL056 and take corrective action. It may be necessary to stop and restart DDF to clear the problem.

If you suspect a problem in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

**DSNL059I** csect-name DDF RESET FROM FAILURE THAT DISABLED DCE-RELATED PROCESSING.

**Explanation:** DDF previously encountered a fatal error while performing DCE-related processing and issued message DSNL058. DDF has been able to reset from this failure.

**System Action:** DDF recovered from the previous failure. The next DRDA CONNECT request requiring DCE authentication will trigger the operations needed to re-enable for DCE-related processing.

**DSNL060I** csect-name DDF ATTEMPTED TO FREE A CELL AT ADDRESS=address IN THE CELL POOL WITH CPOOL ID=cpid BUT FAILED WITH CPOOL ABEND CODE=syscode, REASON CODE=reascode. STORAGE RECOVERED WHEN DDF STOPPED.

**Explanation:** DB2 has received a CONNECT request from a DRDA requester that requires DCE authentication. DDF acquired a cell from its cell pool to process the request. The request completed successfully, but DDF encountered an error in freeing the cell. ABEND CODE contains the MVS system code returned by the CPOOL macro and REASON CODE contains the associated reason code. For example, an ABEND CODE of '00000C78' is the C78 system code. Refer to the OS/390 MVS System Codes for an explanation and a description of relevant reason codes.

**System Action:** DDF completes STOP DDF processing. Cell pool storage is recovered when DB2 is stopped.

**System Programmer Response:** No action is required. If this error occurs repeatedly and the storage loss appears to be negatively affecting DDF operation, then stop and restart DB2 to clear the problem. Report the problem. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

**DSNL062I** csect-name DDF DCE-RELATED SHUTDOWN PROCESSING HAS STARTED.

**Explanation:** A -STOP DDF or -STOP DDF MODE(FORCE) command is being executed. DDF is performing operations to disable for DCE-processing and to free resources used in that processing.

**System Action:** DDF completes the disablement operations and then continues with the STOP DDF processing.

**DSNL063I** csect-name DDF DCE-RELATED SHUTDOWN PROCESSING HAS COMPLETED.

**Explanation:** A -STOP DDF or -STOP DDF MODE(FORCE) command is being executed. DDF has completed DCE operations that disable its capability to perform DCE-related processing.

**System Action:** DDF continues with STOP DDF processing.

**DSNL064E** csect-name DDF DCE-RELATED SHUTDOWN PROCESSING FAILED. FAILURE TOKEN=token

**Explanation:** A -STOP DDF or -STOP DDF MODE(FORCE) command is being executed. An operation to remove DDF’s DCE processing capability has failed. FAILURE TOKEN contains serviceability information.

**System Action:** DDF continues with STOP DDF processing. It should not be affected by this failure.

**# DSNL065I** csect-name CURRENT DDF STATE DOES NOT PERMIT STOP DDF MODE(SUSPEND)

**# Explanation:** The current DDF state does not allow suspend processing to be initiated. DDF must be started for normal processing in order for suspend processing to be initiated.

**# System Action:** The command is not executed.
DSNL066I  csect-name STOP DDF MODE(SUSPEND) COMPLETE
Explanation: DDF suspend processing has completed successfully. DDF has suspended all inbound activity.
System Action: Processing continues normally.

DSNL067I  csect-name CURRENT DDF STATE DOES NOT PERMIT START DDF
Explanation: The current DDF state does not allow START DDF processing to be initiated.
System Action: The command is not executed.

DSNL068I  csect-name START DDF (RESUME PROCESSING) COMPLETE
Explanation: DDF has resumed normal processing.
System Action: Processing continues normally.

DSNL069I  csect-name DDF IS SUSPENDING
Explanation: DDF has initiated suspend processing.
System Action: Processing continues normally.

DSNL070I  csect-name DDF IS RESUMING
Explanation: DDF has initiated resume processing.
System Action: Processing continues normally.

DSNL071I  csect-name WAIT OR CANCEL REQUIRES KEYWORD SUSPEND
Explanation: The WAIT(n) or CANCEL(n) keywords require that MODE(SUSPEND) be specified. For information about the STOP DDF command, see DB2 Command Reference.
System Action: The command is not executed.

DSNL072I  csect-name WAIT TIME EXPIRED, DDF RESUME PROCESSING INITIATED
Explanation: The DDF suspend process has not completed successfully in the period of time specified for the WAIT keyword, so DDF resume processing has been initiated. For information about the STOP DDF command, see DB2 Command Reference.
System Action: DDF resume processing has been initiated.

DSNL073I  csect-name CANCEL TIME EXPIRED, CANCEL ACTIVE DBAT PROCESSING HAS BEEN INITIATED
Explanation: The DDF suspend process has not completed successfully in the period of time specified for the CANCEL keyword so DDF is cancelling all active data base access threads (DBATS). For information about the STOP DDF command, see DB2 Command Reference.
System Action: DDF is attempting to terminate all active database access threads.

DSNL200I  DISPLAY LOCATION REPORT Follows—
Explanation: This message is the title for the -DISPLAY LOCATION command report output. It precedes the other messages generated by this command. This message is followed by messages DSNL201I and DSNL202I. The final message for the report is be message DSNL205I.
System Action: The -DISPLAY LOCATION command continues normally.

DSNL201I  LOCATION PRDID LINKNAME REQUESTERS SERVERS CONVS
Explanation: The column headings for the list of locations generated by the -DISPLAY LOCATION command are displayed. The definitions are listed below:

<table>
<thead>
<tr>
<th>Heading</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOCATION</td>
<td>The location name associated with the remote site</td>
</tr>
<tr>
<td>PRDID</td>
<td>Identifies the database product at the location</td>
</tr>
<tr>
<td>LINKNAME</td>
<td>The VTAM LU name associated with the remote location</td>
</tr>
<tr>
<td>REQUESTERS</td>
<td>The number of agents at this site that are requesting data from the remote location</td>
</tr>
<tr>
<td>SERVERS</td>
<td>The number of agents at this site that are acting as a server to the remote location</td>
</tr>
<tr>
<td>CONVS</td>
<td>The total number of conversations in use between this site and the remote location</td>
</tr>
</tbody>
</table>

See message DSNL202I a for more specific description of these items.
The message number and subsystem recognition character are not included in this message.
System Action: Processing continues normally.

DSNL202I  location prdid linkname requesters servers convs
Explanation: This message lists the status of communications between a remote location and this DB2 subsystem. Information about the status appears below:

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>location</td>
<td>A 16-byte name for the remote site.</td>
</tr>
<tr>
<td>prdid</td>
<td>Identifies the database product at the location in the form nnvvrmm.</td>
</tr>
<tr>
<td>nnn</td>
<td>Identifies the database product. For example, DSN=DB2.</td>
</tr>
<tr>
<td>vv</td>
<td>Product version.</td>
</tr>
<tr>
<td>rr</td>
<td>Product release.</td>
</tr>
<tr>
<td>m</td>
<td>Product modification level.</td>
</tr>
</tbody>
</table>

Note: The PRDID will contain blanks if DB2 is behaving as a DRDA server via a TCP/IP connection. As a server, DB2 cannot uniquely identify the requester. TCP/IP provides DB2 with the requester's IP address and ephemeral port. However, the ephemeral port will be different for each inbound connection. Thus, effectively, DB2
only knows the requester's IP address and there could be many different DRDA requesters at that IP address, each with a different PRDID. As a result, DB2 cannot make a PRDID association, and will display blanks.

The VTAM LU name or dotted decimal IP address associated with the remote location.

A count of the threads at this location that access data at the remote location. The count includes all the allied threads associated with the remote location, and any database access threads that are accessing data at the remote location.

A count of the database access threads at this location that access data for agents at the remote location.

A count of the total number of conversations between the two systems. The count includes both allied and database threads.

Two possible values can appear in this column:
1. For VTAM network connections, this column contains the VTAM-defined session instance identifier of the session on which the conversation is executing. If the session identifier is not applicable, this field contains zeros.

2. For TCP/IP network connections, this column contains a string of the form 'local:remote', where:
   - local -- specifies the local DB2 system's TCP/IP port number
   - remote -- specifies the remote partner’s TCP/IP port number

One of the following:
V The conversation is active within VTAM or TCP/IP.
W The conversation is suspended in DB2 waiting for VTAM or TCP/IP notification that the function is complete.
Blank, otherwise.

Status of the conversation:
A Conversation in allocation.
C Session limits are being negotiated with the partner (CNOS) prior to conversation allocation.

System Action: Processing continues normally.
DSNL205I • DSNL400E

**DSNL205I DISPLAY LOCATION REPORT COMPLETE**

**Explanation:** This message follows messages DSNL200I, DSNL201I, and DSNL202I and indicates that the -DISPLAY LOCATION report successfully completed.

The message number and subsystem recognition character are not included in this message.

**System Action:** Command processing continues normally.

**DSNL206I csect-name named-command COMMAND INVALID, DDF NOT STARTED**

**Explanation:** The 'named-command' command was issued before the distributed data facility (DDF) was started. The 'named-command' command executes successfully only if the DDF is operating.

**System Action:** Processing continues normally.

**DSNL207I DISPLAY LOCATION NO LOCATIONS FOUND**

**Explanation:** The -DISPLAY LOCATION command was unable to find any locations associated with the specified list of locations. If all locations were specified, there is no distributed activity.

**System Action:** Processing completed normally.

**User Response:** If a location list was specified, reissue the -DISPLAY LOCATION command using the LOCATION(*) parameter to display information for all locations, if desired.

**DSNL208I DISPLAY LOCATION TERMINATED WITH MAX LINES**

**Explanation:** The message indicates the -DISPLAY LOCATION report was truncated. The report was generated in response to a command from an MVS console and more than 254 response messages were generated. Only 254 response messages are returned.

**System Action:** Command processing completes. The truncated report is written to the MVS console.

**User Response:** Reissue the -DISPLAY LOCATION request specifying a specific location or list of locations.

**DSNL400E INDOUBT THREAD RESOLUTION WITH COORDINATOR location SHOWS HEURISTIC DAMAGE FOR luwid=token - REMOTE COMMIT VERSUS LOCAL ABORT. INFORMATIONRecorded in trace record with IFCID=207 and IFCID SEQUENCE NUMBER=seq-no1 and in trace record with IFCID=203 and IFCID SEQUENCE NUMBER=seq-no2**

**Explanation:** DB2 has participant responsibility in the logical unit of work identified by 'luwid=token'. Resolution with the coordinator identified by 'location' shows heuristic damage occurred. The DB2 thread representing the logical unit of work was previously resolved using the RECOVER INDOUBT command. The action taken was to abort the thread. Subsequently, communication was reestablished with the coordinator and resolution shows that the coordinator committed the thread.

- The application was told that commit succeeded.
- Any resources updated at the coordinator were committed.
- Updated resources at this DB2 were rolled back.

**location** The field contains one of the following:
- The relational database name (location name)
- The VTAM LU name (<luname>)
- The dotted decimal IP address (nnn.nnn.nnn.nnn).

**luwid=token** The global logical unit of work id and the local token that identify the thread.

**seq-no1** The IFCID sequence number associated with the 207 trace record. The sequence number is printed in hexadecimal format. If the sequence number is zero, IFCID 207 was not active or it was active with a destination of the resident trace table only. IFCID 207 is a member of statistics class 4, which has a default destination of SMF. This trace record is written when the heuristic damage condition was detected and contains information about the damage condition.

**seq-no2** The IFCID sequence number associated with the 203 trace record. The sequence number is printed in hexadecimal format. If the sequence number is zero, IFCID 203 was not active or it was active with a destination of the resident trace table only. IFCID 203 is a member of statistics class 4, which has a default destination of SMF. This trace record was written when the heuristic decision to commit or abort was made and contains information about the decision, including the names of any downstream participants.

**System Action:** Alert A004 is generated. A trace record whose IFCID=207 is written. Indoubt resolution with the coordinator completes.

**System Programmer Response:** Determine the destination of statistics class 4 and locate and print the trace record with SEQUENCE NUMBER=seq-no1. Call the database administrator.

**Database Administrator Action:** Correct the damage. This is not an easy task. Since the time of the heuristic action, the data that was aborted with the RECOVER INDOUBT command might have been used by many applications - read and/or write. Correcting the damage might involve reversing the effects of these applications as well. Tools available are:

- The statistics trace class 4 contains an IFCID 207 trace record. This record contains the RBA of the first DB2 log record written for the logical unit of work whose LUWID is included in this message.
The DSN1LOGP utility provides a summary report that identifies the table spaces modified by the logical unit of work and any downstream participant locations involved in the logical unit of work.

DISPLAY THREAD TYPE(INDOUBT) displays the RBA of the first DB2 log record written for the logical unit of work whose LUWID is included in this message. This information continues to appear in the DISPLAY THREAD report until it is purged with the RESET INDOUBT command.

Contact your IBM Support Center for further assistance.

---

**DSNL401E** INDOUBT THREAD RESOLUTION WITH COORDINATOR location SHOWS HEURISTIC DAMAGE FOR luwid=token - REMOTE ABORT VERSUS LOCAL COMMIT. INFORMATION RECORDED IN TRACE RECORD WITH IFCID=207 AND IFCID SEQUENCE NUMBER=seq-no1 AND IN TRACE RECORD WITH IFCID=203 AND IFCID SEQUENCE NUMBER=seq-no2

**Explanation:** DB2 has participant responsibility in the logical unit of work identified by 'luwid=token'. Resolution with the coordinator identified by 'location' shows heuristic damage occurred. The DB2 thread representing the logical unit of work was previously resolved with the RECOVER INDOUBT command. The action taken was to commit the thread. Subsequently, communication was reestablished with the coordinator and resolution shows that the coordinator aborted the thread.

- The application was told that commit failed.
- Any resources updated at the coordinator were rolled back.
- Updated resources at this DB2 were committed.

**System Action:** Alert A004 is generated. A trace record whose IFCID=207 is written. Indoubt resolution with the coordinator completes.

**System Programmer Response:** Determine the destination of statistics class 4. Locate and print the trace record with SEQUENCE NUMBER=seq-no. Call the database administrator.

**Database Administrator Action:** Correct the damage. This is not an easy task. Since the time of the heuristic action, the data that was committed with the RECOVER INDOUBT command might have been used by many applications - read and/or write. Correcting the damage might involve reversing the effects of these applications as well. Tools available are:

- The statistics trace class 4 contains an IFCID 207 trace record. This record contains the RBA of the first DB2 log record written for the logical unit of work whose LUWID is included in this message.
- The DSN1LOGP utility provides a summary report that identifies the table spaces modified by the logical unit of work, and any downstream participant locations involved in the logical unit of work.
- DISPLAY THREAD TYPE(INDOUBT) displays the RBA of the first DB2 log record written for the logical unit of work whose LUWID is included in this message. This information continues to appear in the DISPLAY THREAD report until it is purged with the RESET INDOUBT command.

Contact your IBM Support Center for further assistance.

---

**DSNL402I** INDOUBT THREAD RESOLUTION WITH PARTICIPANT location SHOWS HEURISTIC DAMAGE FOR luwid=token - REMOTE COMMIT VERSUS LOCAL ABORT. INFORMATION RECORDED IN TRACE RECORD WITH IFCID=207 AND IFCID SEQUENCE NUMBER=seq-no

**Explanation:** DB2 has coordinator responsibility for the logical unit of work identified by 'luwid=token'. Resolution with a participant shows heuristic damage occurred. The participant identified by 'location' manually resolved the indoubt thread identified by 'luwid=token'. The action taken was to commit the thread. This is inconsistent with the abort decision of the coordinator.

- The application was told that commit failed.
- Any resources updated at the participant were committed.
- Updated resources at this DB2 were rolled back.

**System Action:** Alert A004 is generated. A trace record whose IFCID=207 is written. Indoubt resolution with the coordinator completes.

**System Programmer Response:** Determine the destination of statistics class 4. Locate and print the trace record with SEQUENCE NUMBER=seq-no. Call the database administrator.

**Database Administrator Action:** Correct the damage. This is not an easy task. Since the time of the heuristic action, the data that was committed with the RECOVER INDOUBT command might have been used by many applications - read and/or write. Correcting the damage might involve reversing the effects of these applications as well. Tools available are:

- The statistics trace class 4 contains an IFCID 207 trace record. This record contains the RBA of the first DB2 log record written for the logical unit of work whose LUWID is included in this message.
- The DSN1LOGP utility provides a summary report that identifies the table spaces modified by the logical unit of work, and any downstream participant locations involved in the logical unit of work.
- DISPLAY THREAD TYPE(INDOUBT) displays the RBA of the first DB2 log record written for the logical unit of work whose LUWID is included in this message. This information continues to appear in the DISPLAY THREAD report until it is purged with the RESET INDOUBT command.

Contact your IBM Support Center for further assistance.
member of statistics class 4, which has a default destination of SMF.

System Action: Alert A004 is generated. A trace record whose IFCID=207 is written. Indoubt resolution with the participant completes.

System Programmer Response: Call the database administrator.

Database Administrator Action: Inform the database administrator at 'location' that heuristic damage occurred for the logical unit of work with LUWID='luwid'. DB2 was the coordinator for the logical unit of work and made the decision to abort the database updates made by 'luwid'. At 'location' a heuristic decision was made to COMMIT the updates made by 'luwid'.

Information about the heuristic damage continues to appear in the DISPLAY THREAD TYPE(INDOUBT) report until it is purged with the RESET INDOUBT command.

Explanation: DB2 has coordinator responsibility for the logical unit of work identified by 'luwid-token'. Resolution with a participant shows heuristic damage occurred. The participant identified by 'location' manually resolved the indoubt thread identified by 'luwid-token'. The action taken was to abort the thread. This is inconsistent with the commit decision of the coordinator.

- The application was told that commit succeeded.
- Any resources updated at the participant were rolled back.
- Updated resources at this DB2 were committed.

location The relational database name (location-name), SNA LU name (<luname>), or dotted decimal IP address of the participant.
luwid=token The global logical unit of work id and the local token that identify the thread.
seq-no The IFCID sequence number associated with the trace record. The sequence number is printed in hexadecimal format. If the sequence number is zero, IFCID 206 was not active or it was active with a destination of the resident trace table only. IFCID 206 is a member of statistics class 4, which has a default destination of SMF.

System Action: The indoubt thread remains indoubt. Alert A003 is generated. A trace record whose IFCID=206 is written.

System Programmer Response: This is an APARable error, probably at the coordinator, but possibly at the DB2 participant. The DB2 documentation required is contained in the statistics class 4 trace record that was written. Determine the destination of statistics class 4. Locate and print the trace record with SEQUENCE NUMBER=seq-no.

Call the database administrator.

Database Administrator Action: DB2 does not attempt to automatically resolve the indoubt thread. The indoubt thread must be manually resolved. The commit or abort decision made at the coordinator must be determined so that the same decision can be made at this participant DB2.

Contact the database administrator at the coordinator location to determine whether the thread with LUWID=luwid committed or aborted.

If the coordinator system is another DB2, the following steps can be taken at the DB2 coordinator to determine the commit or abort decision.

1. If the coordinator DB2 system is running and a DB2 conditional restart was not performed since the error was detected at this (the participant) location, ask the database administrator at the DB2 coordinator location to issue one of the following DISPLAY THREAD TYPE(INDOUBT) commands:

   - A -DISPLAY THREAD TYPE(INDOUBT), using the LOCATION keyword and specifying the location name of the local DB2.
   - A -DISPLAY THREAD TYPE(INDOUBT) LUWID(luwid)

If a thread with LUWID=luwid appears in the display, then the display also includes the commit or abort decision. If
no thread with LUWID=luwid appears in the display, the thread was aborted.

2. If the DB2 coordinator is down or if a conditional restart was performed there, ask the database administrator at the DB2 coordinator to run DSN1LOGP, specifying SUMMARY(ONLY) FILTER LUWID(luwid). The output from DSN1LOGP includes the commit or abort decision.

Use the RECOVER INDOUBT command at this (the participant) location to resolve the indoubt thread.

---

**Explanation:** During execution of the two phase commit protocol with the coordinator identified by 'location', communication failed. Phase 1 of the protocol completed and the thread is prepared for either commit or abort.

The thread is placed in the indoubt state and appears in a DISPLAY THREAD TYPE (INDOUBT) report. Periodic attempts are made to reestablish communication with the coordinator for automatic indoubt resolution. If successful, message DSNL407 or DSNL415 is written.

- **luwid=token** The global logical unit of work id and the local token that identify the thread.
- **location** The field contains one of the following:
  - The relational database name (location name)
  - The VTAM LU name (<luname>)
  - The dotted decimal IP address (nnn.nnn.nnn.nnn).
- **seq-no** The IFCID sequence number associated with the trace record. The sequence number is printed in hexadecimal format. If the sequence number is zero, IFCID 209 was not active or it was active with a destination of the resident trace table only. IFCID 209 is a member of statistics class 4, which has a default destination of SMF.

**System Action:** Alert A006 is generated. A trace record whose IFCID=209 is written.

**Operator Response:** If message DSNL407 or DSNL415 for the LUWID specified in the DSNL405 message does not appear in a reasonable amount of time, call the system programmer.

**System Programmer Response:** Determine the cause of the communication failure and have the problem fixed. DB2 periodically attempts to reestablish communication. If the problem cannot be fixed in a reasonable amount of time, call the database administrator. Manual resolution of the indoubt thread might be necessary to release locked resources.

**Database Administrator Action:** Take the following actions to resolve this thread using manual means (that is, take heuristic action) if it is necessary to release locks held by this thread.

- Determine the proper commit or abort decision by contacting the database administrator at the coordinator 'location' shown in this message in order to determine whether the thread with LUWID=luwid committed or aborted.

If the coordinator system is another DB2, the following steps can be taken at the DB2 coordinator to determine the commit or abort decision.

1. If the coordinator DB2 system is running and a DB2 conditional restart was not performed since the error was detected at this (the participant) location, ask the database administrator at the DB2 coordinator location to issue one of the following DISPLAY THREAD TYPE(INDOUBT) commands:
   - A -DISPLAY THREAD TYPE(INDOUBT), using the LOCATION keyword and specifying the location name of the local DB2.
   - A -DISPLAY THREAD TYPE(INDOUBT) LUWID(luwid)

If a thread with LUWID=luwid appears in the display, then the display also includes the commit or abort decision. If no thread with LUWID=luwid appears in the display, then the thread was aborted.

2. If the DB2 coordinator is down or if a conditional restart was performed there, ask the database administrator at the DB2 coordinator to run DSN1LOGP, specifying SUMMARY(ONLY) FILTER LUWID(luwid). The output from DSN1LOGP includes the commit or abort decision.

- Use the RECOVER INDOUBT command to commit or abort the thread.

---

**Explanation:** During execution of the two phase commit protocol with the participant identified by 'location', communications failed. Phase 1 of the protocol completed with the participant, which is prepared to either commit or abort. The decision to commit the thread was made, but cannot be communicated to the participant at this time. The participant is indoubt.

DB2 becomes responsible for indoubt resolution with the participant. This responsibility appears in a DISPLAY THREAD TYPE (INDOUBT) report. Periodic attempts are made to reestablish communication with the participant for automatic indoubt resolution. If successful, message DSNL423 is written.

- **luwid=token** The global logical unit of work id and the local token that identify the thread.
- **location** The field contains one of the following:
  - The relational database name (location name)
  - The VTAM LU name (<luname>)
  - The dotted decimal IP address (nnn.nnn.nnn.nnn).
- **seq-no** The IFCID sequence number associated with the trace record. The sequence number is printed in hexadecimal format. If the sequence number is zero, IFCID 209 was not active or it was active with a destination of the resident
DSNL407I • DSNL409I

trace table only. IFCID 209 is a member of statistics class 4, which has a default destination of SMF.

System Action: Alert A006 is generated. A trace record whose IFCID=209 is written.

Operator Response: If message DSNL423 for the LUWID specified in message DSNL406 does not appear in a reasonable amount of time, call the system programmer.

System Programmer Response: Determine the cause of the communication failure and have the problem fixed. DB2 periodically attempts to reestablish communication. If the problem cannot be fixed in a reasonable amount of time, call the database administrator. The participant might need to manually resolve the indoubt state to release locked resources.

Database Administrator Action: If the unit of work with LUWID=luwid is indoubt at 'location', inform the database administrator there that the logical unit of work with LUWID=luwid was committed to assist in manual resolution of the indoubt thread at 'location'.

DSNL407I AUTOMATIC RESOLUTION OF luwid=token WITH COORDINATOR location RESULTED IN COMMIT

Explanation: The identified indoubt logical unit of work was automatically resolved by communication with the coordinator location. After automatic resolution, this message is issued if message DSNL405 was previously issued to report the thread as indoubt. This message is not issued if message DSNL405 occurs in one restart of DDF or DB2, and automatic resolution occurs in a different restart of DDF or DB2.

luwid=token The global logical unit of work id and the local token that identify the thread

location The field contains one of the following:
  • The relational database name (location name)
  • The VTAM LU name (<luname>)
  • The dotted decimal IP address (nnn.nnn.nnn.nnn).

System Action: Processing continues normally.

DSNL408I INDOUBT THREAD RESOLUTION WITH COORDINATOR location SHOWS HEURISTIC DAMAGE AT PARTICIPANT location FOR luwid=token - COORDINATOR COMMIT VERSUS PARTICIPANT ABORT. INFORMATIONRecorded in Trace Record with IFCID=207 AND IFCID Sequence Number=seq-no

Explanation: DB2 has participant responsibility in the logical unit of work identified by 'luwid=token' for the coordinator at COORDINATOR 'location' and coordination responsibility in the same logical unit of work for the participant at PARTICIPANT 'location'. Heuristic damage occurred.

location The field contains one of the following:
  • The relational database name (location name)
  • The VTAM LU name (<luname>)
  • The dotted decimal IP address (nnn.nnn.nnn.nnn).

luwid=token The global logical unit of work id and the local token that identify the thread.

seq-no The IFCID sequence number associated with the trace record. The sequence number is printed in hexadecimal format. If the sequence number is zero, then IFCID 207 was not active or it was active with a destination of the resident trace table only. IFCID 207 is a member of statistics class 4, which has a default destination of SMF.

System Action: Alert A004 is generated. A trace record whose IFCID=207 is written. Indoubt resolution with the coordinator completes.

System Programmer Response: Determine the destination of statistics class 4. Locate and print the trace record with SEQUENCE NUMBER='seq-no'. Call the database administrator.

Database Administrator Action: Inform the database administrator at the coordinator 'location' and at the participant 'location' of the problem.

Correcting the damage at the participant is not an easy task. Since the time of the heuristic action, the data that was aborted using manual means might have been used by many applications - read and/or write. Correcting the damage might involve reversing the effects of these applications as well. The following information that is available at DB2 might be helpful in correcting the problem:

• The statistics trace class 4 contains an IFCID 207 trace record. This record contains the RBA of the first DB2 log record written for the logical unit of work whose LUWID is included in this message.

• The DSN1LOGP utility provides a summary report that identifies the table spaces modified by the logical unit of work at the local DB2 as well as any downstream participant locations involved in the logical unit of work. This information, while not directly related to the damage at the participant, might be useful in determining the scope of the problem.

• DISPLAY THREAD TYPE(INDOUBT) displays the RBA of the first DB2 log record written for the logical unit of work whose LUWID is included in this message. This information continues to appear in the DISPLAY THREAD report until it is purged with the RESET INDOUBT command.

Contact your IBM Support Center for further assistance.

DSNL409I INDOUBT THREAD RESOLUTION WITH COORDINATOR location SHOWS HEURISTIC DAMAGE AT PARTICIPANT location FOR luwid=token - COORDINATOR ABORT VERSUS PARTICIPANT COMMIT. INFORMATION Recorded in Trace Record with IFCID=207 AND IFCID Sequence Number=seq-no

Explanation: DB2 has participant responsibility in the logical unit of work identified by 'luwid=token' for the coordinator at COORDINATOR 'location' and coordination responsibility in the same logical unit of work for the participant at PARTICIPANT 'location'. Heuristic damage occurred.
The application was told that commit failed.
Any resources updated at the coordinator and at this DB2 were rolled back.
Updated resources at the participant were committed.

location The field contains one of the following:
- The relational database name (location name)
- The VTAM LU name (<luname>)
- The dotted decimal IP address (nnn.nnn.nnn.nnn).

seq-no The IFCID sequence number associated with the trace record. The sequence number is printed in hexadecimal format. If the sequence number is zero, then IFCID 207 was not active or it was active with a destination of the resident trace table only. IFCID 207 is a member of statistics class 4, which has a default destination of SMF.

System Action: Alert A004 is generated. A trace record whose IFCID=207 is written. Indoubt resolution with the coordinator completes.

System Programmer Response: Determine the destination of statistics class 4. Locate and print the trace record with SEQUENCE NUMBER=seq-no. Call the database administrator.

Database Administrator Action: Inform the database administrator at the coordinator 'location' and at the participant 'location' of the problem.

Correcting the damage at the participant is not an easy task. Since the time of the heuristic action, the data that was committed using manual means might have been used by many applications - read and/or write. Correcting the damage might involve reversing the effects of these applications as well. This information is available at DB2 and might be helpful in correcting the problem.

- The statistics trace class 4 contains an IFCID 207 trace record. This record contains the RBA of the first DB2 log record written for the logical unit of work whose LUWID is included in this message.
- The DSN1LOGP utility provides a summary report that identifies the table spaces modified by the logical unit of work at the local DB2 and any downstream participant locations involved in the logical unit of work. This information, while not directly related to the damage at the participant, might be useful in determining the scope of the problem.
- DISPLAY THREAD TYPE(INDOUBT) displays the RBA of the first DB2 log record written for the logical unit of work whose LUWID is included in this message. This information continues to appear in the DISPLAY THREAD report until it is purged with the RESET INDOUBT command.

Contact your IBM support center for further assistance.

Location The field contains one of the following:

- The relational database name (location name)
- The VTAM LU name (<luname>)
- The dotted decimal IP address (nnn.nnn.nnn.nnn).

luwid=token The global logical unit of work id and the local token that identify the thread.

DSNL410I WARM START CONNECTION BY PARTNER location REJECTED. PARTNER CHANGED AT LEAST 1 OF - OUR LOG NAME oldourname(newourname), THEIR LOG NAME oldtheirname(newtheirname), PA_SUPPORT oldpa(newpa), FLAG BYTESENT oldfb(newfb), CCLUNAME_SENT oldccls(newccls), AND INDOUBT THREADS REQUIRE RESOLUTION. SEE IFCID=205 TRACE RECORD WITH IFCID SEQUENCE NUMBER=seq-no.

Explanation: An attempt to make a warm start connection with a partner was rejected because the partner specified a different set of sync point parameters than the ones that were in use when communications were lost. DB2 has knowledge of indoubt threads that involve the partner as either the coordinator or a participant. This error might be a recoverable error if the partner can restart with the original sync point parameters. If this is not possible, then the partner must perform a cold start connection with DB2.

location The 'location' with which the connection failed: either the relational database name (location-name) or the logical unit name (<luname>) of the partner.

oldourname The log name for this DB2 subsystem. This value is null if the partner did not initiate the log name exchange.

newourname The log name for this DB2 subsystem, as remembered by our partner and sent to us in the attempted warm start connection. This value is null if the partner did not initiate the log name exchange.

oldtheirname The log name used by the partner during the last connection, as remembered by DB2.

newtheirname The log name used by the partner in the attempted warm start connection.

oldpa The sync point protocol used during the last connection, as remembered by the DB2 (PA - Presumed Abort, PN - Presumed Nothing).

newpa The sync point protocol used during the last connection, as remembered by the partner (PA - Presumed Abort, PN - Presumed Nothing).

oldfb The use of the PS header byte 2 during the last connection, as remembered by DB2 (F - used as flag byte, N - not used as flag byte).

newfb The use of the PS header byte 2 during the last connection, as remembered by the partner (F - used as flag byte, N - not used as flag byte).

oldccls Whether the luname of the conversation correlator was exchanged as part of the sync point protocol during the last connection, as remembered by DB2. (E - was exchanged, N - was not exchanged).

newccls Whether the luname of the conversation correlator was exchanged as part of the sync point protocol during the last connection, as remembered by the partner (E - was exchanged, N - was not exchanged).
seq-no The IFCID sequence number associated with the thread record. The sequence number is printed in hexadecimal format. If the sequence number is zero, then IFCID 0205 was not active or it was active with a destination of the resident trace table only. IFCID 0205 is a member of statistics class 4, which has a default destination of SMF.

System Action: The connection with the partner is rejected. Alert A002 is generated. DB2 retains indoubt knowledge.

System Programmer Response: Call the database administrator.

Database Administrator Action: Contact the database administrator at the partner 'location' and determine if it is possible for the partner to perform a warm start with same sync point parameters as ours ('oldourname', 'oldtheirname', 'oldpa', 'oldfb', 'oldccls'). If this is possible, the next attempt to connect will succeed.

If this cannot be done, then there are two other possible solutions:

- Have the partner 'location' perform a cold start connection with this DB2 subsystem.
- Use the RESET INDOUBT command with the FORCE option in conjunction with the LOCATION parameter to cause the next connection with the partner to be a cold start connection.

There is probably inconsistent data at the coordinator. A list of indoubt threads involving the coordinator 'location' can be displayed using the DISPLAY THREAD command for indoubt type threads by including the LOCATION('location') parameter in the command.

The heuristic decision (that is, to commit or abort the logical unit of work) should be coordinated with any other participants. The existence of other participants might not be easy to determine. The information might be available in the coordinators recovery log even though the coordinator performed a cold start. If the coordinator is a DB2, then it might be possible to execute the DSN1LOGP utility to produce a summary report. If this is possible, the following information might be produced:

- The LUWID of the thread.
- The NID used by IMS or CICS to identify the thread.
- The name of all participants.
- The name of an upstream coordinator if the coordinator is also a participant. This could happen when an application requester accesses a DB2 AS using application-directed access, which in turn accesses another DB2 server with system-directed access. (The local DB2 might be the third system in this scenario.)

At this DB2 participant, all indoubt threads coordinated by the cold starting location must be resolved with the RECOVER INDOUBT command. Locked data remains unavailable until resolution. Threads that were already resolved with this command are discarded. Threads not yet resolved are discarded after resolution with the command.

The commit or abort decision provided using the RECOVER INDOUBT command for a logical unit of work are propagated to all downstream participants, if any.

---

**DSNL412I**

**PROTOCOL ERROR DETECTED IN SYNCPOINT REQUEST/RESPONSE FROM COORDINATOR location LUWID=luwid-token. INFORMATION RECORDED IN TRACE RECORD WITH IFCID=208 AND IFCID SEQUENCE NUMBER=seq-no**

**Explanation:** DB2 is a participant in the logical unit of work identified by 'luwid-token'. A protocol error occurred during the SNA sync point exchange with the coordinator identified by 'location'. The protocol error fits into one of the following categories:

- An unknown SNA PS header was received.
- An SNA PS header was received in the wrong sequence.
- An invalid LU6.2 verb sequence was used to deliver the SNA PS header.
- A DEALLOCATE TYPE(ABEND_SVC) was received from the coordinator, indicating that the coordinator detected a protocol violation in the PS headers transmitted by DB2.

System Action: The connection with the partner is accepted. Alert A001 is generated. A trace record whose IFCID=204 is written.

System Programmer Response: Call the database administrator.

Database Administrator Action: DB2 is a participant with one or more indoubt threads where the coordinator is 'location'. The DBMS at 'location' performed a cold start. The DB2 participant assumes that the coordinator recovery log was lost or damaged and indoubt thread resolution cannot be achieved.

seq-no The IFCID sequence number associated with the trace record. The sequence number is printed in hexadecimal format. If the sequence number is zero, then IFCID 208 was not active or it was active with a destination of the resident trace table only. IFCID 208 is a member of statistics class 4, which has a default destination of SMF.

System Action: The connection with the partner is accepted. Alert A001 is generated. A trace record whose IFCID=204 is written.

System Programmer Response: Call the database administrator.

Database Administrator Action: DB2 is a participant with one or more indoubt threads where the coordinator is 'location'. The DBMS at 'location' performed a cold start. The DB2 participant assumes that the coordinator recovery log was lost or damaged and indoubt thread resolution cannot be achieved.

---

**DSNL411E**

**COLD START CONNECTION BY COORDINATOR location ACCEPTED. INDOUBT THREADS NEED MANUAL RESOLUTION. INFORMATION RECORDED IN TRACE RECORD WITH IFCID=204 AND IFCID SEQUENCE NUMBER=seq-no**

**Explanation:** DB2 has participant responsibility for indoubt threads. The coordinator informed DB2 that it performed a cold start operation and lost all knowledge of indoubt threads. The indoubt threads at this DB2 must be manually resolved with the RECOVER INDOUBT command.

System Action: The connection with the partner is rejected. Alert A002 is generated. DB2 retains indoubt knowledge.

System Programmer Response: Call the database administrator.

Database Administrator Action: Contact the database administrator at the partner 'location' and determine if it is possible for the partner to perform a warm start with same sync point parameters as ours ('oldourname', 'oldtheirname', 'oldpa', 'oldfb', 'oldccls'). If this is possible, the next attempt to connect will succeed.

If this cannot be done, then there are two other possible solutions:

- Have the partner 'location' perform a cold start connection with this DB2 subsystem.
- Use the RESET INDOUBT command with the FORCE option in conjunction with the LOCATION parameter to cause the next connection with the partner to be a cold start connection.

---

**DSNL411E**

**COLD START CONNECTION BY COORDINATOR location ACCEPTED. INDOUBT THREADS NEED MANUAL RESOLUTION. INFORMATION RECORDED IN TRACE RECORD WITH IFCID=208 AND IFCID SEQUENCE NUMBER=seq-no**

**Explanation:** DB2 has participant responsibility for indoubt threads. The coordinator informed DB2 that it performed a cold start operation and lost all knowledge of indoubt threads. The indoubt threads at this DB2 must be manually resolved with the RECOVER INDOUBT command.

System Action: The connection with the partner is rejected. Alert A002 is generated. DB2 retains indoubt knowledge.

System Programmer Response: Call the database administrator.

Database Administrator Action: Contact the database administrator at the partner 'location' and determine if it is possible for the partner to perform a warm start with same sync point parameters as ours ('oldourname', 'oldtheirname', 'oldpa', 'oldfb', 'oldccls'). If this is possible, the next attempt to connect will succeed.

If this cannot be done, then there are two other possible solutions:

- Have the partner 'location' perform a cold start connection with this DB2 subsystem.
- Use the RESET INDOUBT command with the FORCE option in conjunction with the LOCATION parameter to cause the next connection with the partner to be a cold start connection.

There is probably inconsistent data at the coordinator. A list of indoubt threads involving the coordinator 'location' can be displayed using the DISPLAY THREAD command for indoubt type threads by including the LOCATION('location') parameter in the command.

The heuristic decision (that is, to commit or abort the logical unit of work) should be coordinated with any other participants. The existence of other participants might not be easy to determine. The information might be available in the coordinators recovery log even though the coordinator performed a cold start. If the coordinator is a DB2, then it might be possible to execute the DSN1LOGP utility to produce a summary report. If this is possible, the following information might be produced:

- The LUWID of the thread.
- The NID used by IMS or CICS to identify the thread.
- The name of all participants.
- The name of an upstream coordinator if the coordinator is also a participant. This could happen when an application requester accesses a DB2 AS using application-directed access, which in turn accesses another DB2 server with system-directed access. (The local DB2 might be the third system in this scenario.)

At this DB2 participant, all indoubt threads coordinated by the cold starting location must be resolved with the RECOVER INDOUBT command. Locked data remains unavailable until resolution. Threads that were already resolved with this command are discarded. Threads not yet resolved are discarded after resolution with the command.

The commit or abort decision provided using the RECOVER INDOUBT command for a logical unit of work are propagated to all downstream participants, if any.
trace table only. IFCID 208 is a member of statistics class 4, which has a default destination of SMF.

If the protocol error was detected before the commit decision, the unit of work at the DB2 system might be indoubt. DB2 does not automatically resolve such an indoubt thread.

If the protocol error was detected after the commit decision, the unit of work either completed commit or abort processing.

**System Action:** Alert A005 is generated. A trace record whose IFCID=208 is written.

**System Programmer Response:** This is an APARable error, probably at the coordinator, but possibly at DB2. The DB2 documentation required is contained in the statistics class 4 trace record. Determine the destination of statistics class 4. Locate and print the trace record with SEQUENCE NUMBER='seq-no'.

The database administrator might need to manually resolve the indoubt thread.

**Database Administrator Action:** Determine if the 'luwid' is indoubt by using the DISPLAY THREAD command for type indoubt threads and including the LUWID('token') parameter in the command. If the thread is indoubt, it must be manually resolved using the RECOVER INDOUBT command. The commit or abort decision made at the coordinator must be determined so that the same decision can be made at DB2.

Contact the database administrator at the coordinator location to determine whether the thread with LUWID=luwid committed or aborted.

If the coordinator system is another DB2, then the following steps can be taken at the DB2 coordinator to determine the commit or abort decision.

1. If the coordinator DB2 system is running and a DB2 conditional restart was not performed since the error was detected at this (the participant) location, ask the database administrator at the DB2 coordinator location to issue one of the following DISPLAY THREAD TYPE(INDOUBT) commands:
   - A -DISPLAY THREAD TYPE(INDOUBT), using the LOCATION keyword and specifying the location name of the local DB2.
   - A -DISPLAY THREAD TYPE(INDOUBT) LUWID(‘luwid’)

If a thread with LUWID=luwid appears in the display, then the display also includes the commit or abort decision. If no thread with LUWID=luwid appears in the display, then the thread was aborted.

2. If the DB2 coordinator is down or if a conditional restart was performed there, ask the database administrator at the DB2 coordinator to run DSN1LOGP, specifying SUMMARY(ONLY) FILTER LUWID(‘luwid’). The output from DSN1LOGP includes the commit or abort decision.

**Explanation:** DB2 is the coordinator of the logical unit of work identified by 'luwid=token'. A protocol error occurred during the SNA sync point exchange with the participant identified by 'location'. The protocol error fits into one of the following categories:

- An unknown SNA PS header was received.
- An SNA PS header was received in the wrong sequence.
- An invalid LU6.2 verb sequence was used to deliver the SNA PS header.
- A DEALLOCATE TYPE(ABEND_SVC) was received from the participant, indicating that the participant detected a protocol violation in the PS headers transmitted by DB2.

**System Action:** Alert A005 is generated. A trace record whose IFCID=208 is written.

**System Programmer Response:** This is an APARable error, probably at the participant, but possibly at the DB2 coordinator. The DB2 documentation required is contained in the statistics class 4 trace record. Determine the destination of statistics class 4. Locate and print the trace record with SEQUENCE NUMBER='seq-no'.

Call the database administrator. The participant might need to manually resolve the indoubt thread.

**Database Administrator Action:** The DB2 coordinator does not know the status of the thread at the participant. The DB2 coordinator assumes that it is indoubt and maintains knowledge of the indoubt participant until it is purged with the RESET INDOUBT command. If the thread is indoubt at the participant, it must be resolved using manual (heuristic) means. The status of the thread at the local DB2 (the coordinator) can be determined with the DISPLAY THREAD command for type indoubt threads by including the LUWID('token') parameter in the command.

If the 'participant' location is also a DB2, the RECOVER INDOUBT command can be used at the participant to resolve the indoubt thread.
**DSNL414E • DSNL417E**

**DSNL414E**  PROTOCOL ERROR DURING INDOUBT THREAD RESOLUTION WITH PARTICIPANT  
*location* LUWID=*luwid=token* INFORMATION Recorded in Trace Record with IFCID=206 and IFCID SEQUENCE NUMBER=*seq-no*  

**Explanation:** DB2 has coordinator responsibility for the logical unit of work identified by 'luwid-token'. The DB2 thread associated with the logical unit of work is either committed or aborted. A protocol error occurred during indoubt resolution with the participant identified by 'location'.

The thread at the participant remains indoubt. DB2 rejects further attempts to automatically resolve the indoubt thread.

- **location**  The relational database name (location-name) of the participant.
- **luwid=token**  The global logical unit of work id and the local token that identify the thread.
- **seq-no**  The IFCID sequence number associated with the trace record. The sequence number is printed in hexadecimal format. If the sequence number is zero, IFCID 206 was not active or it was active with a destination of the resident trace table only. IFCID 206 is a member of statistics class 4, which has a default destination of SMF.

**System Action:** Alert A003 is generated. A trace record whose IFCID=206 is written.

**System Programmer Response:** This is an APARable error, probably at the participant, but possibly at the DB2 coordinator. The DB2 documentation required is contained in the statistics class 4 trace record. Determine the destination of statistics class 4. Locate and print the trace record with SEQUENCE NUMBER='seq-no'.

Call the database administrator. The participant might need to manually resolve the indoubt thread.

**Database Administrator Action:** The DB2 coordinator maintains knowledge of the indoubt participant until it is purged with the RESET INDOUBT command. If the thread is indoubt at the participant, it must be manually (heuristically) resolved. The status of the thread at the local DB2 (the coordinator) can be determined with the DISPLAY THREAD command for type indoubt threads by including the LUWID('token') parameter in the command.

If the participant is another DB2, the RECOVER INDOUBT command can be used to resolve the indoubt thread.

**DSNL415I**  AUTOMATIC RESOLUTION OF *luwid=token* WITH COORDINATOR *location* RESULTED IN ABORT  

**Explanation:** The identified indoubt logical unit of work was automatically resolved by communication with the coordinator location. After automatic resolution, this message is issued if message DSNL405 was previously issued to report the thread as indoubt. This message is not issued if message DSNL405 occurs in one restart of DDF or DB2, and automatic resolution occurs in a different restart of DDF or DB2.

- **luwid=token**  The global logical unit of work id and the local token that identify the thread

**System Action:** Alert A001 is generated. A trace record whose IFCID=204 is written.

**System Programmer Response:** Call the database administrator.

**DSNL416I**  COLD START CONNECTION REJECTED BY PARTNER *location*  

**Explanation:** DB2 attempted to make a cold-start connection with a partner location. The partner rejected this attempted connection. DB2 never rejects cold-start connections by partners.

- **location**  Either the relational database name (location-name) or the logical unit name (<luiname>) of the partner.

**System Action:** The connection was not made.

**System Programmer Response:** Call the database administrator.

**Database Administrator Action:** DB2 is not able to connect the partner 'location' until the partner 'location' allows a cold-start connection with DB2. Contact the database administrator at the partner 'location'.

Contact your IBM Support Center for further assistance.

**DSNL417E**  *ssect-name* COLD START DETECTED AT COORDINATOR LOCATION *location* FOR INDOUBT THREAD WITH *luwid=token*. MANUAL RESOLUTION IS REQUIRED. INFORMATIONRecorded in Trace Record with IFCID=204 and IFC SEQUENCE NUMBER='seq-no'.  

**Explanation:** DB2 has resync responsibility for the indoubt thread identified. The partner location informed DB2 that it had performed a cold start operation and lost all knowledge of this indoubt thread. This indoubt thread must be manually resolved with the RECOVER INDOUBT command, followed by the RESET INDOUBT command.

- **location**  The field contains one of the following:
  - The relational database name (location name)
  - The VTAM LU name (<luiname>)
  - The dotted decimal IP address (nnn.nnn.nnn.nnn).

- **luwid=token**  The logical unit of work id and the local token that identify the thread.

- **seq-no**  The IFCID sequence number associated with the trace record. The sequence number is printed in hexadecimal format. If the sequence number is zero, then IFCID 204 was not active or it was active with a destination of the resident trace table only. IFCID 204 is a member of statistics class 4, which has a default destination of SMF and contains information about a partner's cold start.

**System Action:** Alert A001 is generated. A trace record whose IFCID=204 is written.

**System Programmer Response:** Call the database administrator.
**Database Administrator Action:** DB2 is a participant with one or more indoubt threads where the coordinator is 'location'. The DBMS at 'location' performed a cold start. The DB2 participant assumes that the coordinator recovery log was lost or damaged and indoubt thread resolution cannot be achieved. There may be inconsistent data at the coordinator. A list of indoubt threads involving the coordinator 'location' can be displayed using the DISPLAY THREAD command for indoubt type threads by including the LOCATION('location') parameter in the command.

The heuristic decision (that is, to commit or abort the logical unit of work) should be coordinated with any other participants. The existence of other participants might not be easy to determine. The information might be available in the coordinators recovery log even though the coordinator performed a cold start. If the coordinator is a DB2, then it might be possible to execute the DSN1LOGP utility to produce a summary report. If this is possible, the following information might be produced:

- The LUWID of the thread.
- The NID used by IMS or CICS to identify the thread.
- The name of all participants.
- The name of an upstream coordinator if the coordinator is also a participant. This could happen when an application requester accesses a DB2 AS using application-directed access, which in turn accesses another DB2 server with system-directed access. (The local DB2 might be the third system in this scenario.)

At this DB2 participant, all indoubt threads coordinated by the cold starting location must be resolved with the RECOVER INDOUBT command. Locked data remains unavailable until resolution. Threads that were already resolved with this command are discarded. Threads not yet resolved are discarded after resolution with the command.

The commit or abort decision provided using the RECOVER INDOUBT command for a logical unit of work are propagated to all downstream participants, if any.

**Explanation:**

DB2 has coordinator responsibility for the indoubt thread identified. The partner location informed DB2 that it had performed a cold start operation and lost all knowledge of this indoubt thread. There might be damage at the participant.

- The relational database name (location name).
- The VTAM LU name (<luname>)
- The dotted decimal IP address (nnn.nnn.nnn.nnn).

**System Action:** Alert A001 is generated. A trace record whose IFCID=204 is written.

**System Programmer Response:** Call the database administrator.

**Database Administrator Action:** DB2 is the coordinator with indoubt thread resolution responsibility for one or more indoubt logical units of work at 'location'. The DBMS at 'location' performed a cold start. DB2 assumes that the participant recovery log was lost or damaged and indoubt thread resolution cannot be achieved. There is probably inconsistent data at the participant. Minimally, the participant might not completely reflect the final outcome of the threads that were indoubt at the time the failure occurred. A list of indoubt threads involving the partner 'location' can be displayed using the DISPLAY THREAD command for type indoubt threads by including the LOCATION('location') parameter in the command.

Information about the indoubt participant continues to appear in the DISPLAY THREAD TYPE(INDOUBT) report until it is purged with the RESET INDOUBT command.

**System Action:** The connection was successful. Normal processing continues.

**Explanation:**

A successful warm start connection was made with a partner. A previous attempt to make a warm start connection with the partner was rejected with a DSN410I message because the partner specified an incorrect log name.

**System Programmer Response:** Call the database administrator.

**Database Administrator Action:** DB2 has coordinator responsibility for indoubt threads at a participant and just connected with the participant, which lost all knowledge of indoubt threads because of a previous cold start. There might be damage at the participant.

- The relational database name (location name).
- The VTAM LU name (<luname>)
- The dotted decimal IP address (nnn.nnn.nnn.nnn).

**System Action:** The connection with the partner is accepted. Alert A001 is generated. A trace record whose IFCID=204 is written.

**System Programmer Response:** Call the database administrator.
Database Administrator Action: DB2 is the coordinator with indoubt thread resolution responsibility for one or more indoubt logical units of work at 'location'. The DBMS at 'location' performed a cold start. DB2 assumes that the participant recovery log was lost or damaged and indoubt thread resolution cannot be achieved. There is probably inconsistent data at the participant. Minimally, the participant might not completely reflect the final outcome of the threads that were indoubt at the time the failure occurred. A list of indoubt threads involving the partner 'location' can be displayed using the DISPLAY THREAD command for type indoubt threads by including the LOCATION('location') parameter in the command.

Information about the indoubt participant continues to appear in the DISPLAY THREAD TYPE(INDOUBT) report until it is purged with the RESET INDOUBT command.

**DSNL421I** SNA XLN PROTOCOL VIOLATION BY PARTNER location. INFORMATION RECORDED IN TRACE RECORD WITH IFCID=0236 AND IFCID SEQUENCE NUMBER=seq-no

**Explanation:** DB2 detected a protocol violation in the SNA Exchange Log Names (XLN) exchange with the partner at the specified location.

location Either the relational database name (location-name) or the logical unit name (<luname>) of the partner that sent the invalid XLN message.

seq-no The IFCID sequence number associated with the trace record. The sequence number is printed in hexadecimal format. If the sequence number is zero, then IFCID 0236 was not active or it was active with a destination of the resident trace table only. IFCID 0236 is a member of statistics class 4, which has a default destination of SMF.

**System Action:** The attempt to connect with the remote site fails. DB2 writes a trace record with IFCID 0236.

**Operator Response:** Call the system programmer.

**System Programmer Response:** Contact the system programmer for the remote site. The invalid XLN message is recorded in the IFCID 0236 trace record. The system logic error that causes the invalid XLN message must be corrected at the remote site.

**DSNL422I** WARM START CONNECTION BY PARTNER location REJECTED BECAUSE THE PARTNER REMEMBERS OUR LOG NAME INCORRECTLY. OUR LOG NAME IS name1 AND THE PARTNER REMEMBERS IT AS name2

**Explanation:** An attempt to make a warm start connection with a partner was rejected because the partner specified our log name as name2. Our log name is name1, which is the LUNAME of this DB2. This error might be a recoverable error if the partner can restart with our log name as name1. If this is not possible, then the partner must perform a cold start connection with DB2.

location The 'location' with which the connection failed: either the relational database name (location-name) or the logical unit name (<luname>) of the partner.

name1 Our log name, as remembered by our partner and sent to us in the attempted warm start connection.

name2 Our log name, as remembered by us.

**System Action:** The connection with the partner is rejected. DB2 retains indoubt knowledge.

**System Programmer Response:** Call the database administrator.

**Database Administrator Action:** Contact the database administrator at the partner 'location' and determine if it is possible for the partner to perform a warm start with our log name specified as the LUNAME of this DB2. If this is possible, the next attempt to connect will succeed.

If this cannot be done, then there are two other possible solutions.

- Have the partner 'location' perform a cold start connection with this DB2 subsystem.
- Use the RESET INDOUBT command with the FORCE option in conjunction with the LOCATION parameter to cause the next connection with the partner to be a cold start connection.

**DSNL423I** AUTOMATIC RESOLUTION OF luwid=token WITH PARTICIPANT location RESULTED IN COMMIT

**Explanation:** The identified indoubt logical unit of work was automatically resolved through communication with the participant location. After automatic resolution, this message is issued if message DSNL406 was previously issued reporting the thread as indoubt. This message is not issued if message DSNL406 occurs in one restart of DDF or DB2, and automatic resolution occurs in a different restart of DDF or DB2.

luwid=token The global logical unit of work id and the local token that identify the thread.

location The field contains one of the following:

- The relational database name (location name)
- The VTAM LU name (<luname>)
- The dotted decimal IP address (nnn.nnn.nnn.nnn).

**System Action:** Processing continues normally.

**DSNL424I** AUTOMATIC RESOLUTION OF luwid=token WITH PARTICIPANT location RESULTED IN ABORT

**Explanation:** The identified indoubt logical unit of work was automatically resolved by communication with the participant location. After automatic resolution, this message is issued if message DSNL425 was previously issued reporting the thread as being indoubt. This message is not issued if message DSNL425 occurs in one restart of DDF or DB2, and automatic resolution occurs in a different restart of DDF or DB2.

luwid=token The global logical unit of work id and the local token that identify the thread.

location The field contains one of the following:

- The relational database name (location name)
- The VTAM LU name (<luname>)
- The dotted decimal IP address (nnn.nnn.nnn.nnn).

**System Action:** Processing continues normally.
DSNL425I  THREAD luwid=token AT PARTICIPANT location MAY BE INDOUBT BECAUSE OF A COMMUNICATION FAILURE. DB2 ABORTED THE THREAD. INFORMATION RECORDED IN TRACE RECORD WITH IFCID=209 AND IFCID SEQUENCE NUMBER=seq-no

Explanation: During execution of the two phase commit protocol with the participant identified by 'location', communications failed. Phase 1 of the protocol completed with the participant and it is prepared for either commit or abort. The decision to abort the thread was made, but cannot be communicated to the participant at this time. The participant is indoubt.

DB2 becomes responsible for indoubt resolution with the participant. This responsibility appears in a DISPLAY THREAD TYPE (INDOUBT) report. Periodic attempts are made to reestablish communication with the participant for automatic indoubt resolution. If successful, message DSNL424 is written.

luwid=token The global logical unit of work id and the local token that identify the thread.

location The field contains one of the following:
- The relational database name (location name)
- The VTAM LU name (<luname>)
- The dotted decimal IP address (nnn.nnn.nnn.nnn)

seq-no The IFCID sequence number associated with the trace record. The sequence number is printed in hexadecimal format. If the sequence number is zero, IFCID 209 was not active or it was active with a destination of the resident trace table only. IFCID 209 is a member of statistics class 4, which has a default destination of SMF.

System Action: Alert A006 is generated. A trace record whose IFCID=209 is written.

Operator Response: If message DSNL424 for the LUWID specified in message DSNL406 does not appear in a reasonable amount of time, call the system programmer.

System Programmer Response: Determine the cause of the communication failure and have the problem fixed. DB2 periodically attempts to reestablish communication. If the problem cannot be fixed in a reasonable amount of time, call the database administrator. The participant might need to resolve the indoubt state manually in order to release locked resources.

Database Administrator Action: If the unit of work with LUWID=luwid is indoubt at 'location', inform the database administrator there that the logical unit of work with LUWID=luwid was aborted to assist in manual resolution of the indoubt thread at 'location'.

System Action: Processing continues normally.

System Programmer Response: Call the database administrator.

Database Administrator Action: See the DSNL438I and DSNL439I messages to determine what action to take.

DSNL432I  DDF IS COORDINATOR FOR nnnn THREADS WITH mmmm INDOUBT REMOTE PARTNERS

Explanation: This message is issued when DDF is started or stopped, if DDF determines that this DB2 has coordinator responsibility for one or more indoubt threads with one or more partners. This is a summary status message.

nnnn The number of indoubt threads for which DB2 is the coordinator

mmmm The number of remote partners where the threads are indoubt

System Action: Processing continues normally.

Operator Response: If the message was issued as a result of DDF starting, no action is necessary. If the message was issued as a result of DDF stopping, contact the database administrator.

Database Administrator Action: If the message was issued as a result of stopping DDF, then DB2 maintained all information necessary to perform automatic resynchronization with partner locations and resolve all indoubt units of work. Issue the START DDF command to initiate this process. If the message was issued as a result of starting DDF, then DDF started automatic resynchronization.

DSNL433I  DDF IS PARTICIPANT FOR nnnn INDOUBT THREADS WITH mmmm REMOTE PARTNERS

Explanation: This message is issued when DDF is started or stopped, if DDF determines that this DB2 has participant responsibility for one or more indoubt threads with one or more partners. This is a summary status message.

nnnn The number of indoubt threads for which DB2 is the participant

mmmm The number of remote partners that have coordinator responsibility

System Action: Processing continues normally.
Operator Response: If the message was issued as a result of DDF starting, no action is necessary. If the message was issued as a result of DDF stopping, contact the database administrator.

Database Administrator Action: If the message was issued as a result of stopping DDF, then DB2 maintained all information necessary to perform automatic resynchronization with partner locations and resolve all indoubt units of work. Issue the START DDF command to initiate this process.

If you do not want to perform automatic resynchronization, you can still resolve the indoubt units of work for which DB2 is a participant and which hold database resources locked. Use the DISPLAY THREAD command for type indoubt threads to produce a display that lists these threads. Then use the RECOVER INDOUBT command to either commit or abort these units of work.

To avoid data inconsistency, coordinate this manual resolution with the database administrators at the locations that have coordinator responsibility for each indoubt unit of work. If any of the indoubt units of work at DB2 also have coordinator responsibility for participant locations, then you should notify the database administrators at the participant locations of the commit or abort decision so they can make the same decision.

---

### DSNL434E  DDF NOT STARTED - INCORRECT VTAM RELEASE LEVEL

**Explanation:** The local VTAM release level is older than the minimum release level required by DB2. When DB2 issues the VTAM OPEN macro, the VTAM release level is returned to DB2. DB2 examines the VTAM release level to determine whether the local VTAM system provides the function required by DB2.

**System Action:** The attempt to START DDF fails.

**Operator Response:** Call the system programmer.

**System Programmer Response:** Install a release of VTAM that is compatible with the DB2 system. The DB2 Program Directory identifies the required VTAM release level.

---

### DSNL438I  RESYNC STATUS PURGED FOR COORDINATOR location. LUWID=luwid, URID=urid, STATUS=s INFORMATION RECORDED IN TRACE RECORD WITH IFCID=235 and IFCID SEQUENCE NUMBER=seq-no

**Explanation:** The information related to resynchronization with the remote coordinator location for the logical unit of work identified by 'luwid', which is displayed in this message, is being purged by DB2. Automatic indoubt resolution responsibility for this distributed logical unit of work can no longer be performed.

This situation can arise in one of two ways:

- A DB2 conditional restart (other than a DB2 cold start; that is, a DB2 conditional restart with STARTRBA=ENDRBA) is being performed.
- An inconsistency in the DB2 log was detected during DB2 restart processing (indicated by a DSNL429I message).

**location** The relational database name (location name)

**luwid** The global logical unit of work id that identifies the logical unit of work.

**urid** The unit of recovery identifier. This is the RBA on the DB2 recovery log of the log record that marks the beginning of the logical unit of work. This is the earliest RBA required to process the logical unit of work during restart.

**s** Restart status of the logical unit of work. When DB2 came down, the logical unit of work was in one of these states:

- **A** INABORT: The logical unit of work was in the “must-complete” phase of abort, but abort has not yet completed.
- **C** INCOMMIT: The logical unit of work was in the “must-complete” phase of commit, but commit has not yet completed.
- **D** INDOUBT: The logical unit of work completed the first phase of commit, but DB2 has not yet received the commit or abort decision from the coordinator.
- **F** INFLIGHT: The logical unit of work has not yet completed the first phase of commit and should be backed out.
- **U** UNKNOWN: The status of the logical unit of work is not known to DB2 because of conditional restart.

**seq-no** The IFCID sequence number associated with the trace record. The trace record is written to statistics class 4, which is started to SMF as a default during DB2 installation. Statistics class 4 must be started to a permanent destination (SMF or GTF) for the trace record to be accessible. The sequence number is printed in hexadecimal.

**System Action:** Processing continues normally.

**System Programmer Response:** Call the database administrator.

**Database Administrator Action:** The resynchronization information that was purged by DB2 is recorded in this message. To determine the proper commit or abort decision made by the coordinator at 'location', use the status code as follows:

- **A** The correct decision is to abort the logical unit of work.
- **C** The correct decision is to commit the logical unit of work.
- **D** Contact the database administrator at 'location' to determine the correct decision.
- **F** The correct decision is to abort the logical unit of work.
- **U** Contact the database administrator at 'location' to determine the correct decision.

---

### DSNL439I  RESYNC STATUS PURGED FOR PARTICIPANT location. LUWID=luwid, URID=urid, STATUS=s INFORMATION RECORDED IN TRACE RECORD WITH IFCID=235 and IFCID SEQUENCE NUMBER=seq-no

**Explanation:** DB2 is purging the information related to resynchronization with the remote participant location for the logical unit of work identified by 'luwid', which is displayed in this message. Automatic indoubt resolution responsibility for this distributed logical unit of work can no longer be performed.
This situation can arise in one of two ways:

- A DB2 conditional restart (other than a DB2 cold start; that is, a DB2 conditional restart with STARTRBA=ENDRBA) is being performed.
- An inconsistency in the DB2 log was detected during DB2 restart processing (indicated by a DSNL429I message).

**location**
The field contains one of the following:
- The relational database name (location name)
- The VTAM LU name (<luname>)
- The dotted decimal IP address (nnn.nnn.nnn.nnn).

**luwid**
The global logical unit of work id that identifies the logical unit of work.

**urid**
The unit of recovery identifier. This is the RBA on the DB2 recovery log of the log record that marks the beginning of the logical unit of work. This is the earliest RBA required to process the logical unit of work during restart.

**s**
Restart status of the logical unit of work. When DB2 came down, the logical unit of work was in one of these states:
- A INABORT: The logical unit of work was in the “must-complete” phase of abort, but abort has not yet completed.
- C INCOMMIT: The logical unit of work was in the “must-complete” phase of commit, but commit has not yet completed.
- D INDOUBT: The logical unit of work completed the first phase of commit, but DB2 has not yet received the commit or abort decision from the coordinator.
- F INFLIGHT: The logical unit of work has not yet completed the first phase of commit and should be backed out.
- U UNKNOWN: The status of the logical unit of work is not known to DB2 because of conditional restart.

**seq-no**
The IFCID sequence number associated with the trace record. The trace record is written to statistics class 4, which is started to SMF as a default during DB2 installation. Statistics class 4 must be started to a permanent destination (SMF or GTF) for the trace record to be accessible. The sequence number is printed in hexadecimal.

**System Action:** Processing continues normally.

**System Programmer Response:** Call the database administrator.

**Database Administrator Action:** The resynchronization information that was purged by DB2 is recorded in this message. When communicating the proper commit or abort decision to the database administrator at ‘location’, use the status code as follows:
- A Abort the logical unit of work.
- C Commit the logical unit of work.
- D See the DSNL438I message produced for the same ‘luwid’ and ‘urid’ to determine the coordinator ‘location’. Contact the database administrator at ‘location’ to determine the correct decision.
- F Abort the logical unit of work.
- U If there is a DSNL438I message for the same ‘luwid’ and ‘urid’, proceed as described above under ‘D’. Otherwise, there might be information available on the DB2 log that a DSN1LOGP summary report can provide. If this is not successful, contact the IBM Support Center.

**DSNL440I csect-name RESET INDOUBT COMMAND SPECIFICATION IN ERROR**

**Explanation:** A RESET INDOUBT command was issued, but the specification of keywords or keyword parameter values was in error.

**System Action:** No indoubt information was purged. System processing continues normally.

**User Response:** One of the following errors was made in the RESET INDOUBT command specification:
- RESET INDOUBT was issued without any other keywords specified. At least one of the following keywords must also be specified: LUNAME, IPADDR, LOCATION, or LUWID.
- RESET INDOUBT was issued with both the LUWID and LOCATION keywords specified, but a list of LOCATION keyword parameter values was specified. When both the LUWID and LOCATION keywords are specified only one LOCATION keyword parameter value is allowed.
- RESET INDOUBT was issued with at least one LOCATION keyword parameter value that began with a '-'<', but did not end with a '>', or the length of the bracketed value was not 1 to 8 characters. When the LOCATION keyword parameter value is specified in the <luname> format, the luname value must be bracketed with '-'<-' and '>' and be 1 to 8 characters long.
- RESET INDOUBT was issued with an invalid IPADDR keyword parameter value. Verify that the specified IPADDrs are in the proper dotted decimal form, that there is a colon delimeter between the IPADDR and port, and that the port number is valid.

If needed, issue the DISPLAY THREAD TYPE(INDOUBT) command to display information (including LOCATION, LUWID, and LUNAME values) about all indoubt threads. Correct the RESET INDOUBT command specification, and reissue the command.

**DSNL441I KEYWORD ‘LUWID’ PARAMETER VALUE parmvalue FORMAT IN ERROR**

**Explanation:** A RESET INDOUBT command with the LUWID parameter was issued, but the specified parameter value (parmvalue) has an invalid format for an LUWID. There are two correct formats for the LUWID parameter. The first correct format is called a token, and is a 1 to 5 digit decimal number. The second correct format is ‘netid.luname.luwnunique.comseq’, where:

- netid A 1 to 8 character network ID
- luname A 1 to 8 character luname
- luwnunique A 12 character hexadecimal number
- comseq A 4 character hexadecimal number

All fields in the second correct format must be separated by a period (.) delimiter.

**System Action:** Indoubt information about the specified logical unit of work is not purged from the system.
User Response: To determine the correct LUWID value for the unit of work indoubt information that you want to purge, issue the DISPLAY THREAD TYPE(INDOUBT) command to display all units of work for which indoubt information exists. Then reissue the RESET INDOUBT command, specifying the correct LUWID parameter value.

**DSNL442I QUALIFYING INDOUBT INFORMATION FOR LOCATION location NOT FOUND**

**Explanation:** A -RESET INDOUBT LOCATION('location') command was issued, but DB2 has no indoubt information about the specified location.

**location** The value specified after the LOCATION keyword in the RESET INDOUBT command.

**System Action:** No indoubt information was purged. System processing continues normally.

**User Response:** Use the -DISPLAY THREAD(*) TYPE(INDOUBT) LOCATION(*) command to list the locations for which DB2 has indoubt information. After determining the correct location, reissue the command.

**DSNL443I QUALIFYING INDOUBT INFORMATION FOR LUWID=value NOT FOUND**

**Explanation:** A -RESET INDOUBT LUWID('value') command was issued where 'value' is either an luwid or the local token that represents an luwid. Either DB2 has no indoubt information about the specified luwid or token, or DB2 has indoubt information that cannot be purged using the -RESET INDOUBT command with the LUWID option.

**value** The global logical unit of work id or the local token that was specified for the LUWID keyword in the RESET INDOUBT command.

**System Action:** No indoubt information was purged. System processing continues normally.

**User Response:** Use the -DISPLAY THREAD(*) TYPE(INDOUBT) LOCATION(*) command to list the indoubt information known to DB2. If the -DISPLAY THREAD output does not include information about the specified luwid, then that is the reason the message was issued. If the -DISPLAY THREAD output does include information about the specified luwid, this information cannot be purged using the -RESET INDOUBT command with the LUWID option. Refer to the description of each message produced by the -DISPLAY THREAD output that relates to the specified luwid in order to determine how to proceed. After determining the correct luwid or token, reissue the command.

**DSNL444I QUALIFYING INDOUBT INFORMATION FOR LOCATION location HAS BEEN PURGED**

**Explanation:** A -RESET INDOUBT LOCATION('location') command issued to purge indoubt information about the named location completed successfully and the indoubt information was purged.

**location** Either the relational database name (location-name) or the logical unit name (<luname>) that was specified after the LOCATION keyword on the RESET INDOUBT command.

**System Action:** System processing continues normally.

**DSNL445I QUALIFYING INDOUBT INFORMATION FOR LUWID value HAS BEEN PURGED**

**Explanation:** A -RESET INDOUBT LUWID('value') command, which was issued to purge indoubt information about the specified luwid, completed successfully. The indoubt information was purged.

**value** The value specified for the LUWID keyword in the -RESET INDOUBT LUWID(value) command that is being processed.

**System Action:** System processing continues normally.

**DSNL446I COLD START WILL BE PERFORMED WITH nettype netvalue**

**Explanation:** A -RESET INDOUBT LUNAME('luname') FORCE or a -RESET INDOUBT IPADDR('ipaddr') FORCE command issued to force a cold start completed successfully. The next connection with ‘luname’ or ‘ipaddr’ is a cold start.

**nettype** Identifies the type of network used to access the remote site. There are two possible values:

- **LU** -- indicates that VTAM is used to connect to the remote site.
- **IPADDR** -- indicates that TCP/IP is used to connect to the remote site.

**netvalue** The network address of the remote location.

- If **nettype** is LU, **netvalue** specifies the VTAM LU name of the remote location.
- If **nettype** is IPADDR, **netvalue** specifies the dotted decimal IP address of the remote location.

**System Action:** System processing continues normally.

**DSNL447I CANNOT DELETE ENTRY ‘value’ BECAUSE THERE IS AN INDOUBT THREAD TO BE RESOLVED FIRST**

**Explanation:** A -RESET INDOUBT command was issued with LUNAME(value), IPADDR(value), LOCATION(value), or LUWID(value). The ‘value’ is an LU name, an IP address, a location, or a LUWID (or its token), that identifies a logical unit of work for which DB2 has participant indoubt resolution responsibility, coordinator indoubt resolution responsibility, or both.

**System Action:** Resynchronization responsibility information was not purged. System processing continues normally.

**User Response:** Use the information in this section to determine the correct action to take. Then issue the proper command to perform that action.

The two most probable causes for the problem are that the -RESET INDOUBT command was issued with the wrong parameters, or that an incorrect ‘value’ was specified. Use the -DISPLAY THREAD(*) TYPE(INDOUBT) LOCATION(*) command to display the indoubt information known to DB2.

1. If the intent was to purge participant or coordinator indoubt resolution responsibility, then examine the -DISPLAY THREAD output to determine the location name, or names,
for which this responsibility is to be purged. Then use the
-RESET INDOUBT LUNAME(luname) command with the
FORCE option or the -RESET INDOUBT IPADDR(ipaddr)
command with the FORCE option to purge this responsi-
bility.

To determine the luname or IP address and resync port for
an upstream coordinator that can be used with the FORCE
option, look at the coordinator information from the
DSNV408I message in the -DISPLAY THREAD output.
There are two tokens associated with the coordinator infor-
mation that are delimited by a colon (";").

- The first token is the partner location name or
  "<luname>" for an SNA connection, or the dotted
decimal IP address for a TCP/IP connection
  (nnn.nnn.nnn.nnn).
- The second token is the partner LU name for an SNA
  connection, or the resync port number for a TCP/IP
  connection.

To determine the luname or IP address and resync port for
downstream participants that can be used with the FORCE
option, look at the location names from the DSNV450I and
DSNV446I messages. There are two or three tokens asso-
ciated with the participant location which are delimited by a
colon (";").

- The first token is the partner location name.
- The second token is the partner LU name for an SNA
  connection, or the dotted decimal IP address for a
  TCP/IP connection (nnn.nnn.nnn.nnn).
- The third token only appears if the second token is an
  IP address in which case the third token is the partner
  resync port number.

See the description of the -RESET INDOUBT command in
DB2 Command Reference for more information.

Remember that the FORCE option causes DB2 to purge
all knowledge of indoubt resolution responsibility involving
the luname or ipaddr specified on the command.

Use caution when using the FORCE parameter to purge
participant indoubt information when no errors are pre-
ceding automatic resolution. Normally, after the use of the
RECOVER INDOUBT command, automatic resolution with
the coordinator determines if heuristic damage occurred.
This detection is lost if RECOVER INDOUBT is used before
automatic resolution with the coordinator can be achieved.

Use caution when using the FORCE parameter to purge
coordinator indoubt information when no errors are pre-
ceding automatic resolution. Once the information is
purged, any participant that is indoubt is forced to use a
heuristic decision process to resolve the indoubt logical
unit of work.

2. Examine the -DISPLAY THREAD output. If the value speci-
cified in the command (and displayed in the DSNL447I
message) is incorrect, determine the correct value and
reissue the command using the correct value.
in the display thread report for indoubt threads. The resources held by the thread continue to be held. Automatic resolution of the indoubt state is attempted periodically. Resources held by the thread are released after indoubt resolution occurs.

luwid=token The global logical unit of work id and the local token that identify the thread

System Action: Processing continues normally.

Operator Response: If the purpose of canceling this thread was to free the resources held by the thread, call the database administrator.

Database Administrator Action: To release the resources held by the indoubt thread before automatic resolution with the coordinator, a manual commit or abort decision can be made with the RECOVER INDOUBT command. First, issue the DISPLAY THREAD command for an indoubt thread report, which includes the subject thread. From this report, determine the name of the coordinator. Contact the coordinator system and find out whether a commit or abort decision was made.

---

### DSNL451I QUALIFYING INDOUBT INFORMATION FOR LUNAME luname NOT FOUND

**Explanation:** A -RESET INDOUBT LUNAME(luname') command was issued, but DB2 has no indoubt information about the specified luname.

luname The logical unit name, as defined to VTAM, of the coordinator or participant

System Action: No indoubt information was purged. System processing continues normally.

User Response: Use the -DISPLAY THREAD(*) TYPE(INDOUBT) LOCATION(*) command to list the locations for which DB2 has indoubt information. Entries associated with a particular LUNAME have a location name in this form: 'luname'. Use 'luname' (without the enclosing brackets) as the input string to RECOVER INDOUBT.

After determining the correct luname, reissue the command.

---

### DSNL452I QUALIFYING INDOUBT INFORMATION FOR LUNAME luname HAS BEEN PURGED

**Explanation:** A -RESET INDOUBT LUNAME(luname') command was issued and the specified luname completed successfully. The indoubt information was purged.

luname The luname specified for the LUNAME keyword in the -RESET INDOUBT LUNAME(luname') command being processed.

System Action: The specified indoubt information was purged. System processing continues normally.

---

### DSNL500I CONVERSATION FAILED TO LOCATION=locname

**Explanation:** An advanced program-to-program communications (APPC) conversation failed, or could not be allocated, because a VTAM return code indicates a conversation failure. VTAM return codes are defined in VTAM for MVS/ESA Programming for LU 6.2.

SNA sense codes that start with 00 represent DB2 reason codes. Refer to Section 6, SNA CODES on page 1039 for a description of more common SNA sense codes returned to DB2 by VTAM.

The variables that are not return codes are described as follows:

**User Response:** Use the -DISPLAY THREAD(*) TYPE(INDOUBT) LOCATION(*) command to list the locations for which DB2 has indoubt information. Entries associated with TCP/IP have a string with this format in the LOCATION field:

\*nnn.nnn.nnn.nnn\*.

After determining the correct ipaddr, reissue the command.

---

### DSNL454I csect QUALIFYING INDOUBT INFORMATION FOR IP ADDRESS ipaddr HAS BEEN PURGED

**Explanation:** A -RESET INDOUBT IPADDR(ipaddr) force command was issued but DB2 has no knowledge of the specified 'ipaddr'.

csect The CSECT name of the DB2 module that issued the message

ipaddr The dotted decimal TCP/IP address of the coordinator or participant

System Action: The specified indoubt information was purged. System processing continues normally.

---

### DSNL455I csect DB2 HAS NO INFORMATION RELATED TO IP ADDRESS ipaddr

**Explanation:** A -RESET INDOUBT IPADDR(ipaddr) command was issued but DB2 has no knowledge of the specified 'ipaddr'.

csect The CSECT name of the DB2 module that issued the message

ipaddr The dotted decimal TCP/IP address of the coordinator or participant

System Action: No indoubt information was purged. System processing continues normally.

---

### DSNL500I CONVERSATION FAILED TO LOCATION=locname

**Explanation:** An advanced program-to-program communications (APPC) conversation failed, or could not be allocated, because a VTAM return code indicates a conversation failure. VTAM return codes are defined in VTAM for MVS/ESA Programming for LU 6.2.

SNA sense codes that start with 00 represent DB2 reason codes. Refer to Section 6, SNA CODES on page 1039 for a description of more common SNA sense codes returned to DB2 by VTAM.

The variables that are not return codes are described as follows:
<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>locname</td>
<td>The location name associated with the remote site.</td>
</tr>
<tr>
<td>luname</td>
<td>The VTAM LU name associated with the remote location.</td>
</tr>
<tr>
<td>modename</td>
<td>The logon mode used by DB2 to allocate the conversation.</td>
</tr>
<tr>
<td>convid</td>
<td>The conversation identifier given DB2 by VTAM when the conversation was allocated.</td>
</tr>
<tr>
<td>sessid</td>
<td>The session identifier given DB2 by VTAM when the conversation was allocated.</td>
</tr>
</tbody>
</table>

**System Action:** Communication on the conversation is discontinued.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Refer to VTAM for MVS/ESA Programming for LU 6.2 for failure analysis or “Section 4, DB2 Codes” on page 577 for information on reason codes.

---

**DSNL501I**

**Message:** CNOS PROCESSING FAILED FOR LU 

**Variables:**
- luname: The VTAM LU name associated with the remote location.
- modename: The logon mode used by DB2 to allocate the conversation.
- convid: The conversation identifier given DB2 by VTAM when the conversation was allocated.
- sessid: The session identifier given DB2 by VTAM when the conversation was allocated.

**System Action:** Communication on the conversation is not allowed.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Refer to VTAM for MVS/ESA Programming for LU 6.2 for failure analysis or “Section 4, DB2 Codes” on page 577 for information on reason codes.

---

**DSNL504I**

**Message:** RESOURCE UNAVAILABLE

**Variables:**
- csect-name: A resource type code.
- reason: A reason code.
- type: An advanced program-to-program communications (APPC)/VTAM type code.
- location: A location name.
- name: A name.

**System Action:** The requested function requires a resource that is currently unavailable. The reason code, type, location, and name identifies the resource.

**Operator Response:** Note the reason, type codes, location, and name.

**Problem Determination:** The reason for the resource’s unavailability is identified by the reason code. The reason codes that appear in this message are described in “Section 4, DB2 Codes” on page 577. Refer to Table 3 in Appendix B, “Problem determination” on page 1051 for an explanation of resource type codes.

---

**DSNL501I**

**Message:** CONVLIMIT NEGOTIATED FROM x TO y WITH LOCATION locname FOR LU 

**Variables:**
- csect-name: A resource type code.
- x: The most recent value of CONVLIMIT before the last CNOS request was processed by advanced program-to-program communications (APPC)/VTAM for the specified mode name to the specified location.
- y: The current value of CONVLIMIT for the specified mode name to the specified location.
- locname: The location name associated with the remote site that sent the CNOS request to the local DB2 subsystem, or received the CNOS request from the local DB2 subsystem.
- luname: The VTAM LU name associated with the remote location that had its CONVLIMIT changed.

**System Action:** The maximum conversation limit is changed for a mode with a remote subsystem. The limit might change when a CNOS request is received from or sent to a remote subsystem, and the limit is determined by VTAM.

**Operator Response:** The system programmer.

**System Programmer Response:** Refer to VTAM for MVS/ESA Programming for LU 6.2 for failure analysis or “Section 4, DB2 Codes” on page 577 for information on reason codes.
modename The logon mode for the specified location that had its CONVLIMIT changed.

System Action: Conversation requests are queued when the maximum conversation limit is reached for a mode to remote subsystem.

**Explanation:** A TCP/IP socket call failed with the error condition identified by rc and reason.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>csect</td>
<td>The CSECT name of the DB2 module that issued the message.</td>
</tr>
<tr>
<td>locname</td>
<td>The location name associated with the remote site.</td>
</tr>
<tr>
<td>ipaddr</td>
<td>The IP address of the remote site in dotted decimal format.</td>
</tr>
<tr>
<td>port</td>
<td>The TCP/IP port used by the remote site.</td>
</tr>
<tr>
<td>socket</td>
<td>The TCP/IP socket call that returned the error.</td>
</tr>
<tr>
<td>rc</td>
<td>The error condition reported by TCP/IP. The return code values are documented in OS/390 UNIX System Services Programming: Assembler Callable Services Reference.</td>
</tr>
<tr>
<td>reason</td>
<td>Provides further detail associated with the TCP/IP return code. The reason code values are documented in OS/390 UNIX System Services Programming: Assembler Callable Services Reference.</td>
</tr>
</tbody>
</table>

System Action: Communication on the conversation is discontinued.

User Response: Notify the system programmer.

Operator Response: Notify the system programmer.

System Programmer Response: Refer to OS/390 UNIX System Services Programming: Assembler Callable Services Reference for an explanation of the error.

Problem Determination: See System Programmer Response.

**Explanation:** A TCP/IP socket call used to establish communication between DB2 and TCP/IP failed.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>csect</td>
<td>The CSECT name of the DB2 module that issued the message.</td>
</tr>
<tr>
<td>socket</td>
<td>The name of the TCP/IP socket call that failed.</td>
</tr>
<tr>
<td>rc</td>
<td>The return code reported by TCP/IP. The return code values are documented in OS/390 UNIX System Services Programming: Assembler Callable Services Reference.</td>
</tr>
</tbody>
</table>

System Action: DB2 may periodically retry the socket call so that TCP/IP communication can be established.

User Response: Notify the system programmer.

Operator Response: Notify the system programmer.

System Programmer Response: Refer to OS/390 UNIX System Services Programming: Assembler Callable Services Reference for an explanation of the error.

- If socket=SETRLIMIT and reason code=1148033C, then you should define DB2 as a superuser. See DB2 Installation Guide for instructions on enabling DDF as a superuser.
- If socket=TCPKEEPALIVE, then DB2 issues this socket call as a result of the TCP/IP KeepAlive value specified in the DB2 parameters module (usually DSNZPARM). You may specify this value by the TCP/IP KEEPALIVE value in the DSNTP5 installation panel. Another way to specify the value is through the TCPKPALV value in the DSN6FAC macro, used to build the DB2 parameters module.

In this situation, processing continues, and DB2 does not retry the socket call. Verify that the TCP/IP stack being used by DB2 contains the required companion support for this function. If not, modify the DB2 parameter module to prevent DB2 from attempting to override the TCP/IP stack value.

- If socket=GETHOSTBYADDR(ip-address), then DB2 invoked a TCP/IP GetHostByAddr socket call to determine the domain name for the specified IP address. However, the call failed, and DB2 is not able to determine the domain name. DB2 retries the socket call periodically.

During DDF initialization, DB2 first determines the IP address via a GetHostID socket call. The IP address returned is the first IP address listed in the HOME statement of the TCP/IP profile for the selected TCP/IP stack. Verify the IP address. DDF must be stopped and restarted in order for DDF to obtain a new IP address.

**Note:** The IP address returned could depend on the selected TCP/IP stack, in the event that there are multiple TCP/IP stacks. DB2 requires OS/390 Open Edition sockets, and it is Open Edition that determines the TCP/IP stack to use. OS/390 Open Edition provides a way for users to select a specific TCP/IP stack by using the BPXTCAFF utility. For more information on BPXTCAFF, see UNIX System Services Planning, SC28-1890.

Using this IP address, DB2 issues a GetHostByAddr socket call to determine the associated domain name. The OS/390 Resolver handles the GetHostByAddr socket call because DB2 uses the OS/390 Open Edition Asynchronous Sockets interface. This resolver uses the resolver configuration information available to DDF. Until this information for the selected TCP/IP stack is correctly specified for DDF, the OS/390 Resolver will be unable to determine the domain name for DDF. You can find the search order for the "resolver configuration files" for an OS/390 application, such as DDF, in the IP Configuration manual for the appropriate level of the Communication Server for your OS/390 operating system.
**Problem Determination:** See System Programmer Response.

**DSNL513I**  
`csect TCP/IP GETHOSTBYNAME FAILED WITH ERNRO=errno FOR DOMAIN domain`

**Explanation:** DB2 encountered a TCP/IP gethostbyname socket call error when attempting to convert a TCP/IP domain name into an IP address.

**Variable** | **Description**  
--- | ---  
csect | The CSECT name of the DB2 module that issued the message.  
errno | The error condition reported by TCP/IP. The `errno` values are documented in IBM TCP/IP for MVS: Application Programming Reference.  
domain | The TCP/IP domain name that DB2 wants to convert into an IP address. DB2 obtains the domain value from the IPADDR column of the SYSIBM.IPNAMES communications database table.  

**System Action:** The row in SYSIBM.IPNAMES containing the specified `domain` in the IPADDR column is invalid. If the error occurs during DDF startup, the row in SYSIBM.IPNAMES is ignored. If the error occurs during an SQL statement, the SQL statement fails and the location associated with the SYSIBM.IPNAMES row is not available for TCP/IP communication.

**User Response:** Notify the system programmer.  
**Operator Response:** Notify the system programmer.  
**System Programmer Response:** Refer to IBM TCP/IP for MVS: Application Programming Reference for an explanation of the error. Correct the IPADDR column value in SYSIBM.IPNAMES or register the `domain` with TCP/IP.  
**Problem Determination:** See System Programmer Response.

---

**DSNL514I**  
`csect-name TCP/IP SERVICE serv IS NOT DEFINED`

**Explanation:** The TCP/IP getservbyname socket call did not find a matching definition for `serv`.

**Variable** | **Description**  
--- | ---  
serv | The TCP/IP service name that DB2 wants to convert into a TCP/IP port number. DB2 obtains the service name from the PORT column of the SYSIBM.LOCATIONS communication database table.  

**System Action:** The row in SYSIBM.LOCATIONS containing the specified service name in the PORT column is invalid. The associated LOCATION cannot be used for TCP/IP communication. If the error occurs during an SQL statement, the SQL statement fails.

**User Response:** Notify the system programmer.  
**Operator Response:** Notify the system programmer.  
**System Programmer Response:** If the value specified by `serv` is incorrect, correct the PORT column value in SYSIBM.LOCATIONS.

---

**DSNL515I**  
`csect TCP/IP BIND FOR PORT port FAILED WITH RETURN CODE=rc'X AND REASON CODE=reasonX`

**Explanation:** DB2 encountered an error on the TCP/IP bind socket call while attempting to register a TCP/IP port number with the TCP/IP instance.

**Variable** | **Description**  
--- | ---  
csect | The CSECT name of the DB2 module that issued the message.  
port | The TCP/IP port number DB2 wants to register with the TCP/IP instance.  
rc | The return code reported by TCP/IP. The return code values are documented in OS/390 UNIX System Services Programming: Assembler Callable Services Reference.  
reason | The reason code reported by TCP/IP. The reason code values are documented in OS/390 UNIX System Services Programming: Assembler Callable Services Reference.  

**System Action:** If this error occurs for the TCP/IP port used for incoming DRDA requests, the error is probably caused by DB2 restarting on a CEC that already has another DB2 subsystem using the DRDA port number. DB2 will continue to try to activate the TCP/IP port number periodically. If this error occurs for the DRDA resynchronization port, DB2 invokes internal processing that is equivalent to STOP DDF MODE(FORCE).

**User Response:** Notify the system programmer.  
**Operator Response:** Notify the system programmer.  
**System Programmer Response:** Refer to OS/390 UNIX System Services Programming: Assembler Callable Services Reference for an explanation of the error. Define DB2's TCP/IP port number to the TCP/IP instance, or use the change log inventory utility to correct the TCP/IP port number used by DB2.  
**Problem Determination:** See System Programmer Response.

---

**DSNL516I**  
`csect-name LANGUAGE ENVIRONMENT SERVICES NOT AVAILABLE. CEEPIPI ROUTINE CANNOT BE LOADED`

**Explanation:** DB2 must load the Language Environment interface module (CEEPIPI) to process functions requiring Language Environment services. These Language Environment services are required for TCP/IP socket calls, encryption and decryption, and so on. If the CEEPIPI module is not included in an accessible data set such as STEPLIB data sets or the LPA library, DDF is unable to use the Language Environment.

---

If the value specified by `serv` is correct, register the service name with TCP/IP.  
TCP/IP service names are case sensitive, so make sure that the PORT column in SYSIBM.LOCATIONS is an exact match for the service name defined to TCP/IP.
System Action: DDF startup continues, but DDF users cannot use DB2 functions that require Language Environment services.

System Programmer Response: Add the Language Environment library to the DDF STEPLIB concatenation or to the LPA library. The Language Environment library must be APF authorized when it appears in the DDF STEPLIB concatenation.

Problem Determination: Collect the following diagnostic item listed in Appendix B, “Problem determination” on page 1051.

DSNL517I csect-name CEEPIPI func SERVICE FAILED WITH RETURN CODE=rc

Explanation: DB2 uses the Language Environment CEEPIPI service to issue certain TCP/IP socket calls. The Language Environment return code rc was not expected for the indicated Language Environment function call.

func The function requested by DB2. Possible values are:

add_entry(module-name) Add an entry to the Language Environment PIPI table dynamically. Module-name is the name of the module that failed to be added to the PIPI table.

call_sub Run a program that issues a TCP/IP socket call using an existing Language Environment run time environment.

del_sub Delete an entry from the Language Environment PIPI table dynamically.

init_sub Create Language Environment sub run time environment.

term Terminate the Language Environment run time environment.

rc The return code received from CEEPIPI.

System Action: The attempt to issue the LE/370 request fails.

If this message is issued during DDF startup, DDF startup continues.

If this message is issued during an SQL statement, a -904 SQLCODE is returned to the calling application.

System Programmer Response: See Problem Determination.

Problem Determination: Collect the following diagnostic item listed in Appendix B, “Problem determination” on page 1051.

DSNL519I csect TCP/IP SERVICES AVAILABLE FOR PORT tcpport

Explanation: DB2 encountered a TCP/IP failure during DDF startup processing. The DSNL515I message identifies the cause of the failure. After the failure is detected, DDF periodically attempts to reinitialize TCP/IP to allow remote connections. This message is issued when reinitialization is successful.

Variable Description

csect The CSECT name of the DB2 module that issued the message.

domain The TCP/IP port number used by this DB2 subsystem to accept incoming DRDA connection requests.

System Action: The DB2 TCP/IP port number is available to accept incoming DRDA connection requests.

DSNL520I csect TCP/IP SERVICES AVAILABLE FOR RESPORt port

Explanation: DB2 encountered a TCP/IP failure during DDF startup processing. The DSNL515I message identifies the cause of the failure. After the failure is detected, DDF periodically attempts to reinitialize TCP/IP to allow TCP/IP resynchronization to occur. This message is issued when reinitialization is successful.

Variable Description

csect The CSECT name of the DB2 module that issued the message.

port The TCP/IP port number used by this DB2 subsystem to accept incoming resynchronization connection requests.
### System Action:
The DB2 TCP/IP port is available to accept incoming resynchronization connection requests.

<table>
<thead>
<tr>
<th>csect-name</th>
<th>INVALID DDF BSDS VALUES DETECTED (PORT=port,RESPORT=rport).</th>
</tr>
</thead>
</table>

**Explanation:**
DB2 encountered invalid values for the TCP/IP port numbers in the DDF record of the BSDS. Valid TCP/IP port numbers must obey the following rules:
- If PORT is non-zero, RESPORT must also be non-zero.
- If RESPORT is non-zero, PORT must also be non-zero.
- PORT and RESPORT must not specify the same value.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>port</td>
<td>The TCP/IP port number used by this DB2 sub-system to accept incoming DRDA SQL connection requests.</td>
</tr>
<tr>
<td>rport</td>
<td>The TCP/IP port number used by this DB2 sub-system to accept incoming 2-phase commit resynchronization requests.</td>
</tr>
</tbody>
</table>

**System Action:** DDF startup terminates abnormally.

**System Programmer Response:** Use the Change Log Inventory utility (DSNJU003) to correct the TCP/IP port numbers used by DB2.

### System Action:
The DB2 BSDS indicated that TCP/IP access was required, but the required TCP/IP interfaces were not available on this system. The required TCP/IP interfaces are available on this system. The required TCP/IP interfaces were not required, but the required TCP/IP interfaces were not available.

**System Programmer Response:** Use the Change Log Inventory utility (DSNJU003) to deactivate DB2's TCP/IP support, by specifying PORT=0 and RESPORT=0 on the DDF statement.

**System Action:** DDF startup terminates abnormally.

**System Programmer Response:** Take one of the following actions:
- Install OS/390 Release 3 or later, so that the required TCP/IP interfaces are available.
- Use the Change Log Inventory utility (DSNJU003) to deactivate DB2's TCP/IP support, by specifying PORT=0 and RESPORT=0 on the DDF statement.

### System Action:
The DB2 BSDS indicated that TCP/IP access was required, but the required TCP/IP interfaces were not available on this system. The required TCP/IP interfaces are available. The DB2 BSDS indicated that TCP/IP access was required, but the required TCP/IP interfaces were not available on this system.

**System Programmer Response:** Take one of the following actions:
- Install OS/390 Release 3 or later, so that the required TCP/IP interfaces are available.
- Use the Change Log Inventory utility (DSNJU003) to deactivate DB2's TCP/IP support, by specifying PORT=0 and RESPORT=0 on the DDF statement.

### System Action:
The DB2 communications database (CDB) does not exist. The DB2 communications database (CDB) does not exist.

**System Programmer Response:** Notify the system programmer.

**System Programmer Response:** Determine what caused the failure, define the object as required, and issue the -START DDF command.

**Problem Determination:** Print the definition of the communications database (CDB).
**DSNL702I**  CDB TABLE `table-name` DOES NOT HAVE PROPER COLUMN DEFINITIONS, COLUMN `column-name` IS MISSING OR INCORRECTLY DEFINED

**Explanation:** The communications database (CDB) needs a definition for `column-name` in `tablename`. The current definition is missing or incorrect.

**System Action:** Termination of the distributed data facility (DDF) is initiated.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Determine what caused the failure, define the column as required, and issue the -START DDF command.

**Problem Determination:** Print the definition of the communications database (CDB).

---

**DSNL704I**  CDB OBJECT `object-name` DOES NOT HAVE PROPER REFERENTIAL CONSTRAINT DEFINITIONS

**Explanation:** The communications database (CDB) requires referential constraint definitions for `object-name`. The current definition is missing or incorrect.

**System Action:** Termination of the distributed data facility (DDF) is initiated.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Determine what caused the failure, define the missing referential constraint, and issue the -START DDF command. Refer to Section 3 of DB2 Installation Guide.

**Problem Determination:** Print the definition of the communications database (CDB).

---

**DSNL705I**  CDB IS UNAVAILABLE OR INCORRECTLY DEFINED

**Explanation:** During start-up of the distributed data facility, the required CDB was unavailable or incorrectly defined.

**System Action:** Termination of the DDF is initiated.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Refer to the previous message that specifies the cause of the CDB failure (DSNL700I, DSNL701, DSNL702I, DSNL703I, or DSNL704I). Determine what caused the failure, fix the error condition, and issue the -START DDF command.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051.

---

**DSNL706I**  `csect-name` AN ERROR HAS OCCURRED IN DDF EXIT ROUTINE `routine`

**Explanation:** An error occurred following invocation of a DDF exit routine by DB2.

The variable "routine" is the name of the exit routine, DSNHLHLix, invoked by DB2.

**System Action:** The system abends the failing database-access agent.
DSNM... Messages

All of the DSNM... messages are sent to the IMS master terminal operator (MTO), and to the appropriate MVS console.

**SDSM001I** IMS/TM xxxx CONNECTED TO SUBSYSTEM yyyy

Explanation: This is an information message only. The control region of the IMS/TM system specified in the message as 'xxxx' has successfully connected to the DB2 subsystem specified in the message as 'yyyy'. The message is sent to the IMS/TM master terminal operator.

System Action: IMS/TM transactions can access DB2 resources.

**SDSM002I** IMS/TM xxxx DISCONNECTED FROM SUBSYSTEM yyyy RC=rc

Explanation: The IMS/TM system named 'xxxx' control region has disconnected from the DB2 subsystem named 'yyyy' for the RC, reason code, of 'rc'. The message is sent to the IMS/TM master terminal operator. The reason code values are:

<table>
<thead>
<tr>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>IMS/TM is terminating normally (for example, /CKPT FREEZE command).</td>
</tr>
<tr>
<td>B</td>
<td>IMS/TM is terminating abnormally.</td>
</tr>
<tr>
<td>C</td>
<td>DB2 is terminating in a quiesce fashion (for example, DB2 stop quiesce command).</td>
</tr>
<tr>
<td>D</td>
<td>DB2 is terminating abnormally.</td>
</tr>
<tr>
<td>E</td>
<td>The connection between IMS/TM and the DB2 subsystem is terminating; however, both subsystems remain operational.</td>
</tr>
</tbody>
</table>

System Action: The connection between IMS/TM and DB2 terminated. IMS/TM transactions can no longer access DB2 resources.

Operator Response: Notify the system programmer.

System Programmer Response: Refer to Section 4 (Volume 1) of DB2 Administration Guide for failure analysis procedures.

Problem Determination: Recovery information is available on the DB2 log and IMS/TM log to assist in the resolution of the work unit(s) that are indoubt. For each indoubt work unit, an IMS/TM attachment facility snap record (code X '5501FE') is written to the IMS/TM log to indicate the reason for the failure.

**SDSM003I** IMS/TM xxxx FAILED TO CONNECT TO SUBSYSTEM yyyy RC=rc

Explanation: The IMS/TM system (named 'xxxx') control region did not connect to the DB2 subsystem (named 'yyyy'). This message is sent to the IMS/TM master terminal operator. The return code 'rc' indicates the reason for the failure.

<table>
<thead>
<tr>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>The DB2 subsystem is not operational. However, a notify message has been queued and, when the DB2 subsystem is started, it will automatically connect to IMS/TM.</td>
</tr>
<tr>
<td>04</td>
<td>The connection attempt failed between IMS/TM and the DB2 subsystem.</td>
</tr>
</tbody>
</table>

System Action: IMS/TM transactions cannot access DB2 resources.

Operator Response: For return code 00, start the DB2 subsystem. For return code 04, notify the system programmer.

System Programmer Response: Refer to Section 4 (Volume 1) of DB2 Administration Guide for failure analysis procedures.

Problem Determination: Refer to Section 4 (Volume 1) of DB2 Administration Guide for failure analysis procedures. DB2 commands (DISPLAY THREAD and RECOVER INDOUBT) may be used to display and resolve the work unit(s) that are indoubt.

**SDSM004I** RESOLVE INDOUBT ENTRY(S) ARE OUTSTANDING FOR SUBSYSTEM xxxx

Explanation: The DB2 subsystem ID of 'xxxx' has 'indoubt' entry(s) remaining after the IMS/TM subsystem has attempted to resolve the work units that are indoubt. This message is sent to the IMS/TM master terminal operator.

System Action: The connection between the DB2 and IMS/TM subsystems remains active, and applications can access DB2 resources.

Operator Response: Notify the system programmer.

System Programmer Response: Refer to Section 4 (Volume 1) of DB2 Administration Guide for failure analysis procedures. DB2 commands (DISPLAY THREAD and RECOVER INDOUBT) may be used to display and resolve the work unit(s) that are indoubt.

Problem Determination: Recovery information is available on the DB2 log and IMS/TM log to assist in the resolution of the work unit(s) indoubt. For each indoubt work unit, an IMS/TM attachment facility snap record (code X '5501FE') is written to the IMS/TM log.

**SDSM005I** IMS/TM RESOLVE INDOUBT PROTOCOL PROBLEM WITH SUBSYSTEM xxxx

Explanation: The DB2 subsystem ID of 'xxxx' has protocol incompatibilities with IMS/TM. The DB2 resolve indoubt process received an unknown or invalid recovery request (RRE) from IMS/TM. The request was rejected by DB2 and kept by IMS/TM. The message is sent to the IMS/TM master terminal operator.
System Action: The connection between the DB2 and IMS/TM subsystems remains active, and applications can access DB2 resources.

Operator Response: Notify the system programmer.

System Programmer Response: Call the support center after extracting from the IMS/TM log the IMS/TM attachment facility snap records (code X’5501FE’) using the IMS/TM utility DFSERA10.

These records contain the complete request from IMS/TM to DB2, the request type is at offset X’01C’, this is a four-character identifier which should contain any of the following words:


If the IMS/TM recovery request (RRE) found in the log is an invalid one, (not ‘COMM’ or ‘ABRT’), you may manually delete it using the IMS/TM/CHANGE SUBSYS RESET command after consulting with the support center.

If the IMS/TM request is a valid one (abort or commit), you must find the action that IMS/TM performed for that RRE by locating the X’3730’ (commit) or X’3801’ (abort) record in the IMS/TM log and perform the same action under DB2 by using the -RECOVER INDOUBT command. Also refer to Section 4 (Volume 1) of DB2 Administration Guide for more information about resolve-indoubt failure analysis.

Problem Determination: Recovery information is available on the DB2 log and IMS log to assist in the resolution of the problem. For each indoubt work unit, an IMS/TM attachment facility snap record (code X’5501FE’) is written to the IMS/TM log.

---

DSNM100I SUBSYSTEM xxxx NOT AVAILABLE

Explanation: The IMS/TM command facility which routes commands to the DB2 subsystem cannot perform its functions because the DB2 subsystem named ‘xxxx’ is considered not operational.

System Action: The connection to the DB2 subsystem failed for the command. The command is rejected.

System Programmer Response: If the DB2 subsystem is operational, and if you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem. The person entering the request may not be authorized to execute the command. If the DB2 subsystem is not operational, DB2 commands from IMS/TM cannot be processed.

Problem Determination: A snap record (X’5501FF’) is written to the IMS/TM log if a connection request failed.

---

DSNM104I xxxx COMMAND FAILED

Explanation: The DB2 command specified by ‘xxxx’ failed to complete.

System Action: The command terminated without providing an output message. Commands will still be allowed by the IMS/TM attachment facility.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: If the command failed because of an abend, a snap record (X’5501FF’) is written to the IMS/TM log and SYS1.LOGREC information is available.
**DSNN... Message**

**DSNN40**  
THE NUMBER YOU SELECTED IS NOT A VALID SQL RETURN CODE NUMBER

**Explanation:** The user looking at the SQL Return Codes Menu in DB2 HELP selected a number that is not a valid SQL return code.

**System Action:** The SQL Return Codes Menu continues to be displayed.

**User Response:** Select a valid SQL return code number, and try again.

**Operator Response:** Select a valid SQL return code number, and try again.
DSNP... Messages

The DSNP-prefixed messages contain a connection ID, a correlation ID, and a logical-unit-of-work ID. Messages that have the same connection ID, correlation ID, and logical-unit-of-work ID relate to the same user. This makes it possible to scan a number of DSNP-prefixed messages and group activities involving a given user.

**Explanation:** This message warns of an impending space shortage. The data space manager (DSM) extend function CSECT 'DSNPmmmm' detected the space shortage through the use of a 'hedge' quantity 'n'. Reason code 'rrrrr' gives some information about why space could not be obtained. (See Section 4. DB2 Codes on page 577)

There might also be some preceding DSM and VSAM messages that can help to determine why space cannot be obtained. The connection, correlation, and logical-unit-of-work IDs identify the user or application that encountered the problem. Correlation IDs beginning with '0mm', where 'nn' is a number, identify system agents.

A LUW-ID of '01' indicates that the thread does not have a LUW-ID. If the LUW-ID is not an '01', the value is a logical-unit-of-work-id that is assigned to the thread followed by an '=' sign and a token value, which can be used in place of logical-unit-of-work-id in any DB2 command that accepts logical-unit-of-work-id as input.

Messages that have the same connection ID, correlation ID, and LUW-ID relate to the same user. This makes it possible to scan a number of DSNP-prefixed messages and group activities involving a given user.

**System Action:** If sufficient space is available for the current request, continue. Otherwise, message DSNP007I follows, and the current SQL request fails.

**Operator Response:** DSM messages are directed to the database administrator (DBA) or system administrator. However, the DBA or system administrator can request that the operator issue an MVS WRITELOG operator command (for example, 'W A ') to obtain MVS SYSLOG output. The SYSLOG sometimes contains media manager messages that might be helpful to the DBA or system administrator in determining why space could not be allocated.

**System Programmer Response:** Based on the reason code (RC) in the message, as well as information that might be available in access method services or VSAM messages preceding this one, try one of the following:  

- If you do not anticipate further extension of this table space or index, ignore the message.
- If the table space or index is backed by 'user-defined' data sets, and not at maximum (123) extents for the data set, issue an ALTER ADDVOLUMES access method services command to provide additional volumes (up to 133 of them). Or, if the table space is nonpartitioned and the high allocated RBA is greater than or equal to 2GB (2,147,483,648) for the indicated data set, define the data set required for the next sequential piece. (Actually, in this case, there should be an indication in console messages or the reason code that the data set required for the next piece was not found.)
- If the data set is at maximum (123) extents, try reorganizing the table space or index into a data set or data sets having larger primary and secondary values. This process is discussed in Section 2 (Volume 1) of DB2 Administration Guide.

**Problem Determination:** Examine the console messages, SYS1.LOGREC information, and SYSLOG to determine the reason for the condition. Try to resolve it by the methods described in the Operator Response section of this message. If you feel that this message indicates a problem in an IBM program, you should provide the following sources of information about the problem:

- Console sheet showing the message and related messages that might precede or follow it.
- System log printout (obtained via MVS WRITELOG operator command) showing related VSAM/media manager messages that might appear there (usually needed only if you have a message or reason code that indicates a media manager services problem occurred).
- Integrated catalog facility (ICF) catalog listing showing characteristics of the data set in question and of the ICF catalog itself.
- VTOC listing of packs associated with the request, showing space available for data sets, catalogs, VTOC index, and the VTOC itself, as well as data set extent information.
- Any associated dumps.
- SYS1.LOGREC listing showing entries at or near the time of the problem (unless these appear in an associated dump).
- Depending on the reason code, the results of certain SQL SELECT operations on DB2 catalog tables may be needed. (See Section 4. DB2 Codes on page 577)

**Explanation:** Data set definition failed (in CSECT 'DSNPmmmm') for the reason identified by RC. (See Section 4. DB2 Codes on page 577) The connection ID, correlation ID, and logical-unit-of-work ID (LUW-ID) identify the user or application that encountered the problem. The connection, correlation, and logical-unit-of-work IDs identify the user or application that encountered the problem. Correlation IDs beginning with '0nn', where 'nn' is a number, identify system agents.

A LUW-ID of '01' indicates that the thread does not have a LUW-ID. If the LUW-ID is not an '01', the value is a logical-unit-of-work-id that is assigned to the thread followed by an '=' sign and a token value, which can be used in place of
Logical-unit-of-work-id in any DB2 command that accepts logical-unit-of-work-id as input.

Messages that have the same connection ID, correlation ID, and LUW-ID relate to the same user. This makes it possible to scan a number of DSNP-prefixed messages and group activities involving a given user.

**System Action:** The data space manager (DSM) terminates its actions associated with the current SQL request. Higher level functions might terminate the current SQL request or the unit of recovery that issued the request.

**Operator Response:** This message is directed to either the database administrator or the system administrator. Bring the message to their attention if it appears on the MVS operator's console. The installation should consider directing DB2 messages to a console other than the operator's console.

**System Programmer Response:** Investigate the problem indicated by the reason code and preceding access method services messages, if any, and correct it, if possible. If an out-of-space condition exists, see the description of message DSNP001I for actions to consider.

**Problem Determination:** See Problem Determination of message DSNP001I for this information.

---

**Problem Determination:** See Problem Determination for message DSNP001I for this information.

---

**Problem Determination:** See Problem Determination for message DSNP001I for this information.

---

**Problem Determination:** See Problem Determination for message DSNP001I for this information.

---

**Problem Determination:** See Problem Determination for message DSNP001I for this information.
Messages that have the same connection ID, correlation ID, and LUW-ID relate to the same user. This makes it possible to scan a number of DSNP-prefixed messages and group activities involving a given user.

This is not a major problem. However, the data set will not properly reflect subsequent deletions from the volume list in its storage group (via ALTER STOGROUP command in SQL), because the data set’s integrated catalog facility (ICF) catalog entry still contains the volume serial numbers.

If needed, the storage group in question can be identified by issuing an SQL SELECT to get information about the table space or index that is identified by the third and fourth qualifiers (database name, table space name) in the data set name.

**System Action:** Operation continues.

**Operator Response:** This message is directed to the database administrator or the system administrator. Bring it to that person’s attention if it appears on the MVS operator’s console. The installation should consider directing DB2 messages to a console other than the operator’s console.

**System Programmer Response:** Look for associated DSM and access method services messages preceding this one to get additional information. Attempt an ALTER REMOVEVOLUMES access method services command, if appropriate, after issuing a LISTCAT to see which volumes are recorded as ‘candidate’ in the integrated catalog facility (ICF) catalog.

**Problem Determination:** See Problem Determination for message DSNP001I for this information. (However, there should not be a need for VTOC or SYSLOG information for this case.)

---

**DSNP006I**

```
csect – REQUIRED STOGROUP DEFINED
DATA SET NOT AVAILABLE— data-set-name
RC=rrrrrr CONNECTION-ID=xxxxxxxxx,
CORRELATION-ID=yyyyyyyyyyyyy,
LUW-ID=logical-unit-of-work-id=token
```

**Explanation:** An attempt to alter the shareoptions of this data set failed. The data set could not be accessed for the reason indicated by RC. (See [*Section 4, DB2 Codes* on page 577](#).) The connection ID, correlation ID, and logical-unit-of-work ID (LUWID) identify the user or application that encountered the problem. Correlation IDs beginning with ‘0nn’, where ‘nn’ is a number, identify system agents.

The value of the LUWID is a logical-unit-of-work-id that is assigned to the thread followed by an ‘=’ sign and a token value, which can be used in place of the logical-unit-of-work-id in any DB2 command that accepts the logical-unit-of-work-id as input.

Messages having the same connection ID, correlation ID, and LUWID relate to the same user. This makes it possible to scan a number of DSNP-prefixed messages and group activities involving a given user.

**Severity:** 8 (error)

**System Action:** DB2 terminates its actions associated with the current SQL request. DB2 might terminate the current SQL request or the unit of recovery that issued the request.

**Operator Response:** This message is directed to the database administrator or the system administrator. Bring it to that person’s attention if it appears on the MVS operator’s console.

The installation should consider directing DB2 messages to a console other than the operator’s console.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** See Problem Determination for message DSNP001I for this information.

---

**DSNP007I**

```
csect – EXTEND FAILED FOR data-set-name.
RC=rrrrrr CONNECTION-ID=xxxxxxxxx,
CORRELATION-ID=yyyyyyyyyyyyy,
LUW-ID=logical-unit-of-work-id=token
```

**Explanation:** Extension failed in CSECT ‘DSNPmmm’ of the data space manager (DSM). The ‘data-set-name’ identifies the data set that is being extended. RC is the reason code, which indicates why the extend process failed. (See [*Section 4, DB2 Codes* on page 577](#).) The ‘connection ID’, ‘correlation ID’, and ‘logical-unit-of-work ID’ (LUW-ID) identify the user or application that encountered the problem. Correlation IDs beginning with ‘0nn’, where ‘nn’ is a number, identify system agents.

A LUW-ID of ‘***’ indicates that the thread does not have a LUW-ID. If the ‘LUW-ID’ is not an ‘***’, the value is a ‘logical-unit-of-work-id’ that is assigned to the thread followed by an ‘=’ sign and a token value, which can be used in place of ‘logical-unit-of-work-id’ in any DB2 command that accepts ‘logical-unit-of-work-id’ as input.

Messages that have the same ‘connection ID’, ‘correlation ID’, and ‘LUW-ID’ relate to the same user. This makes it possible to scan a number of DSNP-prefixed messages and group activities involving a given user.

**System Action:** The DSM terminates its actions associated with this extend request. Higher level functions might terminate if they cannot continue without a successful extend. In this case, additional console messages and/or SQL codes are produced. In other cases, higher level functions might be able to resolve the space need without the extend, so they continue normally.

**System Programmer Response:** The following sources of information are available to help determine the cause of the failure:

- See the Programmer Response for message DSNP001I.
- Analyze the RC value in conjunction with the console messages.
- The reason code might apply to the data set identified in the message or to another data set that is needed for the extend process. If the reason code indicates a data set access failure, the console messages indicate the data set name. For example, if the RC indicates ‘resource unavailable’, console messages identify the resource that is unavailable. Most likely, the message will be DSNST500I.
- Retrieve diagnostic information from the output of the `DISPLAY DB...RESTRICT OR DISPLAY UTIL(*)...` commands.
- If the extend failed on a result table space, refer to “Sort Data Sets” in Section 5 (Volume 2) of *DB2 Administration Guide*.
- If the extend failed on an SQL insert or update, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.
• If you need to enlarge your data set, refer to “Out of DASD Space” in Section 4 (Volume 1) of DB2 Administration Guide.

• To find out how the extend function operates, refer to “Improving DASD Utilization” in Section 5 (Volume 2) of DB2 Administration Guide.

**Operator Response:** See Operator Response for message DSNP001I for this information.

**System Programmer Response:** See System Programmer Response for message DSNP001I for this information.

**Problem Determination:** See Problem Determination for message DSNP001I

```
DSNP008I  csect= REQUIRED USER-DEFINED DATA SET NOT AVAILABLE—data-set-name RC=rrrrrr
           CONNECTION-ID=xxyyyyyy,
           CORRELATION-ID=yyyyyyyyyy,
           LUW-ID=logical-unit-of-work-id=token

Explanation: One of the following actions applied against user-defined data sets failed in CSECT 'DSNPmmmm' of the data space manager (DSM):

• Create table space or index
• Extend table space or index
• Process the SQL ALTER DATABASE statement
• Process the REORG TABLESPACE utility with SHRLEVEL REFERENCE or CHANGE

Correlation IDs beginning with '0nn', where 'nn' is a number, identify system agents.

One or more of the data sets could not be accessed for the reason indicated by RC. (See [Section 4. DB2 Codes on page 577](#)) The connection ID, correlation ID, and logical-unit-of-work ID (LUWID) identify the user or application that encountered the problem.

The value of the LUWID is a logical-unit-of-work-id that is assigned to the thread followed by an '=' sign and a token value, which can be used in place of logical-unit-of-work-id in any DB2 command that accepts logical-unit-of-work-id as input.

Messages having the same connection ID, correlation ID, and LUWID relate to the same user. This makes it possible to scan a number of DSNP-prefixed messages and group activities involving a given user.

If the name of the data set in the message is different from the name of the original data set (for example, "...A002" instead of "...A001"), a new data set might need to be created. A different name indicates that the original data set exceeded its limit.

**Severity:** 8 (error)

**System Action:** DB2 terminates its actions associated with the current SQL request or utility. DB2 might terminate the current SQL request or utility or the unit of recovery that issued the request.

**Operator Response:** This message is directed to the database administrator or the system administrator. Bring it to that person’s attention if it appears on the MVS operator’s console. The installation should consider directing DB2 messages to a console other than the operator’s console.

**System Programmer Response:** Refer to the reason code in [Section 4. DB2 Codes on page 577](#) The return code description might indicate that one of the following actions needs to be performed or it indicates the necessary steps:

• If the data set does not exist, create it before attempting the create table space/index or extend data set again.
• If the data set shareoptions are incorrect, modify the shareoptions with access method services (AMS).
• The appropriate AMS command is ALTER SHAREOPTIONS.

**Problem Determination:** See Problem Determination for message DSNP001I for this information.

```
DSNP009I  THE FOLLOWING ERROR MESSAGES WERE RECEIVED FOR operation on data-set-name
           CONNECTION-ID=xxyyyyyy,
           CORRELATION-ID=yyyyyyyyyy,
           LUW-ID=logical-unit-of-work-id=token

Explanation: Messages DSNP009I and DSNP010I enclose a block of messages that are received by the data space manager (DSM) subcomponent of DB2 in response to an access method services (AMS) operation.

operation The access method services operation that was being performed.

data-set-name The data set on which the operation was being performed.

The prefix of the messages in the block is usually IDC (access method services messages). However, the prefix can also be IKJ (dynamic allocation) or other system subcomponent IDs. Refer to the appropriate MVS publication for descriptions of the enclosed messages.

The operation can be DEFINE CLUSTER, ALTER ADDVOLUMES, ALTER REMOVEVOLUMES, or DELETE CLUSTER. One or more other DSM messages follow this message to explain what happened as a result of the failure of this access method services request. The connection ID, correlation ID, and logical-unit-of-work ID (LUWID) identify the user or application that encountered the problem.

A LUW-ID of '1' indicates that the thread does not have a LUW-ID. If the LUW-ID is not an '1', the value is a logical-unit-of-work-id that is assigned to the thread followed by an '=' sign and a token value, which can be used in place of logical-unit-of-work-id in any DB2 command that accepts logical-unit-of-work-id as input.

Messages that have the same connection ID, correlation ID, and LUWID relate to the same user. This makes it possible to scan a number of DSNP-prefixed messages and group activities involving a given user. Correlation IDs beginning with '0nn', where 'nn' is a number, identify system agents.

**System Action:** Operation continues.

**Operator Response:** This message is directed to the database administrator or the system administrator. Bring it to that person’s attention if it appears on the MVS operator’s console. The installation should consider directing DB2 messages to a console other than the operator’s console.

**System Programmer Response:** Use this information to help resolve problems indicated by other DSM messages that follow this one.

**Problem Determination:** See Problem Determination for message DSNP001I for this information.
**DSNP011I**  csect – MEDIA MANAGER SERVICES ERROR 
FOR data-set-name. MMRC=cccccccc 
DSMRC=ffffff CONNECTION-ID=xxxxxxxxx, 
CORRELATION-ID=yyyyyyyyyyyy, 
LUW-ID=logical-unit-of-work-id =token 

**Explanation:** The MMRC is the return code that DB2 received from media manager services. Refer to the appropriate MVS publication for a description of these codes. DSMRC is a DSM reason code that indicates which of the media manager services functions, update or extend, failed. (See [Section 4. DB2 Codes on page 577.]) The message is from CSECT ‘DSNPmmmm’ of the data space manager (DSM). The connection ID, correlation ID, and logical-unit-of-work ID (LUW-ID) identify the user or application that encountered the problem. Correlation IDs beginning with ‘0nn’, where ‘nn’ is a number, identify system agents.

A LUW-ID of ‘1’ indicates that the thread does not have a LUW-ID. If the LUW-ID is not an ‘1’, the value is a logical-unit-of-work-id that is assigned to the thread followed by an ‘=’ sign and a token value, which can be used in place of logical-unit-of-work-id in any DB2 command that accepts logical-unit-of-work-id as input.

Messages that have the same connection ID, correlation ID, and LUW-ID relate to the same user. This makes it possible to scan a number of DSNP-prefixed messages and group activities involving a given user.

**System Action:** The DSM terminates its actions associated with the current SQL request. Higher level functions might terminate the current SQL request or the unit of recovery that issued the request.

**Operator Response:** DSM messages are directed to either the database administrator (DBA) or the system administrator. However, they can request that the operator issue an MVS WRITELOG operator command (for example, ‘W A’) to obtain MVS SYSLOG output. The SYSLOG sometimes contains media manager messages that might be helpful to the DBA or system administrator in determining why space could not be allocated.

**System Programmer Response:** This message might be preceded by one or more IEC or IGY messages on the console or in SYSLOG. These messages help to determine what happened and what action to take.

**Problem Determination:** See Problem Determination for message DSNP001I for this information.

---

**DSNP013I**  INSUFFICIENT PRIMARY ALLOCATION SPACE TO FORMAT CONTROL PAGES IN DATA SET data-set-name CONNECTION-ID=xxxxxxxxx, 
CORRELATION-ID=yyyyyyyyyyyy, 
LUW-ID=logical-unit-of-work-id =token 

**Explanation:** Data space manager (DSM) discovered that the primary space quantity given in the data set definition was not large enough. Formatting of required control information in the first several pages was not possible. The connection ID, correlation ID, and logical-unit-of-work ID (LUW-ID) identify the user or application that encountered the problem.

A LUW-ID of ‘1’ indicates that the thread does not have a LUW-ID. If the LUW-ID is not an ‘1’, the value is a logical-unit-of-work-id that is assigned to the thread followed by an ‘=’ sign and a token value, which can be used in place of logical-unit-of-work-id in any DB2 command that accepts logical-unit-of-work-id as input.

Messages that have the same connection ID, correlation ID, and LUW-ID relate to the same user. This makes it possible to scan a number of DSNP-prefixed messages and group activities involving a given user. Correlation IDs beginning with ‘0nn’, where ‘nn’ is a number, identify system agents.

**System Action:** DSM terminates its actions associated with the current SQL request. Higher level functions might terminate the current SQL request or the unit of recovery that issued the request.

**Operator Response:** This message is directed to the database administrator or the system administrator. Bring it to that person’s attention if it appears on the MVS operator’s console. The installation should consider directing DB2 messages to a console other than the operator’s console.

**System Programmer Response:** This should occur only for table spaces or indexes that are not storage group defined. (The DB2 interpreter forces the initial allocation to be large enough if a storage group is used.) Check both the page size specification (4KB or 32KB) and the number of control pages.
A LUW-ID of problem. (LUW-ID) identify the user or application that encountered the connection ID, correlation ID, and logical-unit-of-work ID.

IRLM. RC and the first two digits of SC are documented in SC. RC and SC are the return code and reason code from DB2.

Messages that have the same connection ID, correlation ID, and LUW-ID relate to the same user. This makes it possible to scan a number of DSNP-prefixed messages and group activities involving a given user. Correlation IDs beginning with '0nn', where 'nn' is a number, identify system agents.

System Programmer Response: Investigate the problem indicated by the IRLM return and reason code.

Problem Determination: Provide the console sheet and a dump. A GTF trace might also be required. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem. See the explanation section of this message for additional problem determination information.

DSNP016i CREATE FAILED FOR pageset-name.
RC=rrrrrr CONNECTION-ID=xxxxxxxxx,
CORRELATION-ID=yyyyyyyyyyyyy,
LUW-ID=logical-unit-of-work-id=token

Explanation: Creation of a table space or index space failed in the data space manager (DSM) for the reason given in RC. (See Section 4. DB2 Codes on page 577.) The pageset-name format is ‘dbname.tiname.instance’ , where ‘dbname’ is the database name and ‘tiname’ is the table space or index space name.

This message identifies the function that was in progress at the time of a failure. The specific failure is usually identified by a preceding message. The connection ID, correlation ID, and logical-unit-of-work ID (LUW-ID) identify the user or application that encountered the problem.

A LUW-ID of ‘***’ indicates that the thread does not have a LUW-ID. If the LUW-ID is not an ‘***’, the value is a logical-unit-of-work-id that is assigned to the thread followed by an ‘=’ sign and a token value, which can be used in place of logical-unit-of-work-id in any DB2 command that accepts logical-unit-of-work-id as input.

Messages that have the same connection ID, correlation ID, and LUW-ID relate to the same user. This makes it possible to scan a number of DSNP-prefixed messages and group activities involving a given user. Correlation IDs beginning with ‘0nn’, where ‘nn’ is a number, identify system agents.

System Action: The current SQL or the unit of recovery that issued the request might be terminated.

Operator Response: This message is directed to the database administrator or the system administrator. Bring it to that person’s attention if it appears on the MVS operator’s console. The installation should consider directing DB2 messages to a console other than the operator’s console.

Problem Determination: Provide the console sheet and a dump. A GTF trace might also be required. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem. See the explanation section of this message for additional problem determination information.

System Programmer Response: Investigate the problem indicated by the IRLM return and reason code.

Problem Determination: Provide the console sheet and a dump. A GTF trace might also be required. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem. Refer to the explanation section of this message for additional problem determination information.

System Action: The current SQL or the unit of recovery that issued the request might be terminated.

Operator Response: This message is directed to the database administrator or the system administrator. Bring it to that person’s attention if it appears on the MVS operator’s console. The installation should consider directing DB2 messages to a console other than the operator’s console.

Problem Determination: Provide the console sheet and a dump. A GTF trace might also be required. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem. Refer to the explanation section of this message for additional problem determination information.

System Programmer Response: Investigate the problem indicated by the IRLM return and reason code.

Problem Determination: Provide the console sheet and a dump. A GTF trace might also be required. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem. Refer to the explanation section of this message for additional problem determination information.

System Action: The current SQL or the unit of recovery that issued the request might be terminated.

Operator Response: This message is directed to the database administrator or the system administrator. Bring it to that person’s attention if it appears on the MVS operator’s console. The installation should consider directing DB2 messages to a console other than the operator’s console.

Problem Determination: Provide the console sheet and a dump. A GTF trace might also be required. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem. See the explanation section of this message for additional problem determination information.

System Programmer Response: Investigate the problem indicated by the IRLM return and reason code.

Problem Determination: Provide the console sheet and a dump. A GTF trace might also be required. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem. Refer to the explanation section of this message for additional problem determination information.

System Action: The current SQL or the unit of recovery that issued the request might be terminated.

Operator Response: This message is directed to the database administrator or the system administrator. Bring it to that person’s attention if it appears on the MVS operator’s console. The installation should consider directing DB2 messages to a console other than the operator’s console.

Problem Determination: Provide the console sheet and a dump. A GTF trace might also be required. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem. See the explanation section of this message for additional problem determination information.

System Programmer Response: Investigate the problem indicated by the IRLM return and reason code.

Problem Determination: Provide the console sheet and a dump. A GTF trace might also be required. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem. Refer to the explanation section of this message for additional problem determination information.

Problem Determination: Provide the console sheet and a dump. A GTF trace might also be required. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem. See the explanation section of this message for additional problem determination information.

System Programmer Response: Investigate the problem indicated by the IRLM return and reason code.
person’s attention if it appears on the MVS operator’s console. The installation should consider directing DB2 messages to a console other than the operator’s console.

System Programmer Response: Investigate the problem indicated by reason code and preceding messages, and correct it, if possible.

Problem Determination: See Problem Determination for message DSNP0011 for this information.

```
DSNP017I  RESET FAILED FOR pageset-name. RC=rrrrrr
          CONNECTION-ID=xxxxxxxxx,
          CORRELATION-ID=yyyyyyyyyyyyy,
          LUW-ID=logical-unit-of-work-id =token
```

Explanation: Reset failed in the data space manager (DSM) subcomponent of DB2 for a table space or index space for the reason given in RC. (See "Section 4. DB2 Codes on page 577") The ‘pageset-name’ format is ‘dbname.tiname’, where ‘dbname’ is the database name and ‘tiname’ is the table space or index space name.

This message identifies the function that was in progress at the time of a failure. The specific failure is usually identified by a preceding message. The connection ID, correlation ID, and LUW-ID identify the user or application that encountered the problem.

A LUW-ID of ‘*’ indicates that the thread does not have a LUW-ID. If the LUW-ID is not an ‘*’, the value is a logical-unit-of-work-id that is assigned to the thread followed by an ‘=’ sign and a token value, which can be used in place of logical-unit-of-work-id in any DB2 command that accepts logical-unit-of-work-id as input.

Messages that have the same connection ID, correlation ID, and LUW-ID relate to the same user. This makes it possible to scan a number of DSNP-prefixed messages and group activities involving a given user. Correlation IDs beginning with ‘0nn’, where ‘nn’ is a number, identify system agents.

System Action: DSM terminates its actions associated with the current SQL request. Higher level functions might terminate the current SQL request or the unit of recovery that issued the request.

Operator Response: This message is directed to the database administrator or the system administrator. Bring it to that person’s attention if it appears on the MVS operator’s console. The installation should consider directing DB2 messages to a console other than the operator’s console.

System Programmer Response: Investigate the problem indicated by the reason code and preceding messages, and correct it, if possible.

Problem Determination: See Problem Determination for message DSNP0011 for this information.

```
DSNP018I  DROP FAILED FOR pageset-name. RC=rrrrrr
          CONNECTION-ID=xxxxxxxxx,
          CORRELATION-ID=yyyyyyyyyyyyy,
          LUW-ID=logical-unit-of-work-id =token
```

Explanation: Drop failed in the data space manager (DSM) subcomponent of DB2 for a table space or index space for the reason given in RC. Refer to "Section 4. DB2 Codes on page 577." The ‘pageset-name’ format is ‘dbname.tiname’, where ‘dbname’ is the database name and ‘tiname’ is the table space or index space name. This message identifies the function that was in progress at the time of a failure. The specific failure is usually identified by a preceding message. The connection ID, correlation ID, and logical-unit-of-work ID (LUW-ID) identify the user or application that encountered the problem.

A LUW-ID of ‘*’ indicates that the thread does not have a LUW-ID. If the LUW-ID is not an ‘*’, the value is a logical-unit-of-work-id that is assigned to the thread followed by an ‘=’ sign and a token value, which can be used in place of logical-unit-of-work-id in any DB2 command that accepts logical-unit-of-work-id as input.

Messages that have the same connection ID, correlation ID, and LUW-ID relate to the same user. This makes it possible to scan a number of DSNP-prefixed messages and group activities involving a given user. Correlation IDs beginning with ‘0nn’, where ‘nn’ is a number, identify system agents.

System Action: DSM terminates its actions associated with the current SQL request. Higher level functions might terminate the current SQL request or the unit of recovery that issued the request.

Operator Response: This message is directed to the database administrator or the system administrator. Bring it to that person’s attention if it appears on the MVS operator’s console. The installation should consider directing DB2 messages to a console other than the operator’s console.

System Programmer Response: Investigate the problem indicated by the reason code and preceding messages, and correct it, if possible.

Problem Determination: See Problem Determination for message DSNP0011 for this information.
An LUW-ID of user or application that encountered the problem.

**Explanation:** The specified data set was access method services user-defined and does not have the required DB2 attributes. The connection ID, correlation ID, and LUW-ID identify the user or application that encountered the problem.

The value of the LUWID is a 'logical-unit-of-work-id' that is assigned to the thread, followed by an '=' sign and a token value, which can be used in place of 'logical-unit-of-work-id' in any DB2 command that accepts 'logical-unit-of-work-id' as input.

Messages having the same connection ID, correlation ID, and LUWID relate to the same user. This makes it possible to scan a number of DSNP-prefixed messages and group activities involving a given user. Correlation IDs beginning with '0nn', where 'nn' is a number, identify system agents.

This message is issued by the following CSECTs: DSNPATSO, DSNPSCTO, DSNPSCTC, DSNPRNMO

**Severity:** 8 (error)

**System Action:** No action is taken with the named data set. An error code is returned and a dump is not taken.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Delete the named data set and define it with the correct attributes.

**Problem Determination:** Obtain an access method services LISTCAT for the named data set's attributes. Refer to Section 2 (Volume 1) of DB2 Administration Guide for the correct data set definition attributes.

---

**Problem Determination:** See Problem Determination for message DSNP0011 for this information.

**Explanation:** This is an internal error. The connection ID, correlation ID, and logical-unit-of-work ID (LUW-ID) identify the user or application that encountered the problem.

An LUW-ID of '*' indicates that the thread does not have an LUW-ID. If the LUW-ID is not an '*', the value is a logical-unit-of-work-id that is assigned to the thread followed by an '=' sign and a token value, which can be used in place of the logical-unit-of-work-id in any DB2 command that accepts the logical-unit-of-work-id as input.

Messages that have the same connection ID, correlation ID, and LUW-ID relate to the same user. This makes it possible to scan a number of DSNP-prefixed messages and group activities involving a given user. Correlation IDs beginning with '0nn', where 'nn' is a number, identify system agents.

If message DSNT376l was received before message DSNP021I, the notify request failed because of a timeout condition.

**System Action:** The current SQL statement or the unit of recovery that issued the request might be terminated.
Problem Determination: This is an internal error in the online REORG of utility. See the 'Problem Determination' section of message DSNP0011 for this information.

DSNP027I  csect-name RENAME FAILED OLD
DATASET=data-set-name, NEW DATASET=data-set-name, RC=rrrrrr,
CONNECTION-ID=xxxxxxxx, CORRELATION-ID=yyyyyyyyyyy,
LUW-ID=logical-unit-of-work-id=token

Explanation: An attempt to alter the data set name failed. The connection ID, correlation ID, and LUW-ID of the thread that requested the command are passed in the ARC1100I messages.

Severity: 8 (error)

System Action: DB2 terminates its actions associated with the current SQL request. DB2 might terminate the current SQL request or the unit of recovery that issued the request.

Operator Response: Notify the system programmer.

System Programmer Response: Investigate the reason for the HSM recall failure. Use the information in this message to help resolve this problem. Additional messages on the MVS operator’s console might be associated with this message.

Problem Determination: If the HSMRSN is 999, refer to the following list for the explanation:

<table>
<thead>
<tr>
<th>HSMRC</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>HSM is not active</td>
</tr>
<tr>
<td>8</td>
<td>No storage is available for MWE in CSA.</td>
</tr>
<tr>
<td>36</td>
<td>Input MWE is not within user storage.</td>
</tr>
<tr>
<td>40</td>
<td>Allocated amount of CSA for MWEs was exceeded.</td>
</tr>
<tr>
<td>100</td>
<td>There was an invalid function used.</td>
</tr>
</tbody>
</table>

For all other reason codes (HSMRSN), refer to the DFSMS/MVS: DFSMShsm Managing Your Own Data for an explanation of HSM user messages. The HSM user messages can be determined by appending the value in the HSMRC field of this message to ARC1100I (where HSMRC=12, HSM message is ARC1112). The HSMRSN reason code is referenced in the ARC1100I messages.

DSNP028I  csect-name HSM RECALL FAILED FOR
DSNAME = dsn
HSMRC=rrrrrr, HSMRSN=ssssss CON-
NECTION-ID=xxxxxxxx, CORRELATION-
ID=yyyyyyyyyyy, LUW-ID=logical-unit-of-work-id

Explanation: This message indicates that a required data set was migrated by HSM and an attempt to recall the data set failed, preventing DB2 from accessing the data set. The HSMRC and HSMRSN fields can be used to determine the HSM failure. See Problem Determination below. The connection ID, correlation ID, and ‘logical-unit-of-work ID’ (LUW-ID) identify the user or application that encountered the problem.

A LUW-ID of ‘*’ indicates that the thread does not have a LUW-ID. If the LUW-ID is not an ‘*’, the value is a ‘logical-unit-of-work ID’ that is assigned to the thread followed by an ‘=’ sign and a token value, which can be used in place of ‘logical-unit-of-work ID’ in any DB2 command that accepts ‘logical-unit-of-work ID’ as input.

Messages that have the same connection ID, correlation ID, and LUW-ID relate to the same user. This makes it possible to scan a number of DSNP-prefixed messages and group activities involving a given user. Correlation IDs beginning with ‘0nn’, where ‘nn’ is a number, identify system agents.

Severity: 0 (informational)

System Action: If sufficient space in current volume is available for the current request, DB2 continues. Otherwise, message DSNP007I is issued, and the current SQL request fails.

Operator Response: For more information, issue an MVS WRITELOG operator command (for example, ‘W A’) to obtain MVS SYSLOG output. The SYSLOG sometimes contains VSAM or media manager messages that might be helpful in determining why space could not be allocated.
System Programmer Response: Depending on what information is available in the access method services or VSAM messages preceding this one, try one of the following:

- If you do not anticipate further extension of this table space or index, ignore the message.
- If the table space or index is backed by SMS-managed data sets, use LISTCAT to choose another SMS storage group that has more space available and recover or reorganize the table space or index into the new SMS storage group.
- If the table space or index is DB2-managed but is not SMS-managed, rearrange the DB2 storage group volume list by shifting volumes with free space or by adding new volumes. Use the SQL statements ALTER STOGROUP ADD VOLUMES and ALTER STOGROUP REMOVE VOLUMES and then recover or reorganize the table space or index.
- If the table space or index is user-managed and not SMS-managed, delete and redefine the data set with more space and then recover or reorganize the table space or index.

Problem Determination: Obtain an access method services LISTCAT for the named data set’s VOLUME list for current extent space distribution of volumes.

See the Problem Determination section of message DSNP001I for more information.

Explanation: This message indicates that data set data-set-name has almost reached the maximum number of extents. The maximum number is indicated by mm. You cannot add more volumes if the current volume runs out of space.

The connection, correlation, and logical-unit-of-work IDs identify the user or application that encountered the problem. Correlation IDs beginning with '0nn', where 'n' is a number, identify system agents.

A LUW-ID of '*' indicates that the thread does not have a LUW-ID. If the LUW-ID is not an '*', the value is a logical-unit-of-work-id that is assigned to the thread followed by an '=' sign and a token value, which can be used in place of logical-unit-of-work-id in any DB2 command that accepts logical-unit-of-work-id as input.

Messages that have the same connection ID, correlation ID, and LUW-ID relate to the same user. This makes it possible to scan a number of DSNP-prefixed messages and group activities involving a given user.

Severity: 0 (informational)

System Action: DB2 continues. If the table space or index space is not able to extend when needed, Message DSNP007I is issued and the current SQL request fails.

Operator Response: For more information, issue an MVS WRITELOG operator command (for example, 'W A') to obtain MVS SYSLOG output. The SYSLOG sometimes contains VSAM or media manager messages that might be helpful in determining why space could not be allocated.

System Programmer Response: Based on the information that might be available in the access method services or VSAM messages preceding this one, try one of the following actions:

- If you do not anticipate further extension of this table space or index, ignore the message.
- If the table space or index is DB2-managed and has not yet reached the maximum number of extents, issue the access method services LISTCAT for the named data set’s to see how the extensions are distributed. Your options then include:
  - If there are multiple small extents, you can use the SQL statement ALTER TABLESPACE SECQTY to alter to a larger secondary space allocation quantity.
  - Otherwise, use the ALTER STOGROUP statement to add volumes to the storage group (up to 133 of them).
- If the table space or index is user-managed and has not yet reached the maximum number of extents, issue the access method services command ALTER ADDVOLUMES to provide additional volumes (up to 59 of them).
- If the data set is at the maximum number of extents, recover or reorganize the table space or index into a data set or data sets having larger primary and secondary values. This process is discussed in Section 2 (Volume 1) of DB2 Administration Guide.

Problem Determination: Obtain an access method services LISTCAT for the named data set’s VOLUME list for the extent space distribution.

See the Problem Determination section of message DSNP001I for more information.
DSNR... Messages

The following information messages indicate the progress of DB2 through a restart process.

**DSNR001I** RESTART INITIATED

**Explanation:** This message delimits the beginning of the restart process within startup. The phases of restart are about to begin. These phases are necessary to restore the operational environment to that which existed at the time of the previous termination and to perform any recovery actions that may be necessary to return DB2-managed resources to a consistent state.

**DSNR002I** RESTART COMPLETED

**Explanation:** This message delimits the completion of the restart process within startup.

**DSNR003I** RESTART...PRIOR CHECKPOINT

**Explanation:** The message indicates the first phase of the restart process is in progress and identifies (as `xxxxxxxxxxx`) the log positioning RBA of the checkpoint from which the restart process will obtain its initial recovery information.

**DSNR004I** RESTART...UR STATUS COUNTS IN

**Explanation:** This message indicates the completion of the first phase of the restart process. The counts indicate the number of units of work whose execution state during a previous DB2 termination was such that (to ensure DB2 resource consistency) some recovery action must be performed during this restart process or (by the user) upon completion of the restart process. The counts of IN COMMIT, INDOUBT, INFLIGHT and IN ABORT may provide an indication of the time required to perform the remaining phases of restart (forward and backward recovery). The counts of POSTPONED ABORT URs may provide an indication of the time required to perform -RECOVER POSTPONED processing.

The IN COMMIT count specifies the number that had started but not completed phase 2 of the commit process. These must undergo forward recovery to complete the commit process.

The INDOUBT count specifies the number that were interrupted between phase 1 and phase 2 of the commit process. These must undergo forward recovery to ensure resources modified by them are unavailable until their indoubt status is resolved.

The INFLIGHT count specifies the number that neither completed phase 1 of the commit process nor began the process of backing out. These must undergo backward recovery to restore resources modified by them to their previous consistent state.

The IN ABORT count specifies the number that were in the process of backing out. These must undergo backward recovery to restore resources modified by them to their previous consistent state.

The POSTPONED ABORT count specifies the number whose backout was postponed in an earlier restart process and not attended to prior to this restart process. These must undergo backward recovery after completion of restart, via the -RECOVER POSTPONED command, to restore resources modified by them to their previous consistent state.

This message is issued by the following CSECT: DSNRRCSR

**DSNR005I** RESTART...COUNTS AFTER FORWARD

**Explanation:** The message indicates the completion of the forward recovery restart phase. The counts indicate the number of units of work whose recovery actions could not be completed during the phase. Typically, those in an IN COMMIT state remain because the recovery actions of some subcomponents have not been completed. Those units of work in an INDOUBT state will remain until connection is made with the subsystem that acts as their commit coordinator.

**Operator Response:** No action is required unless the conditions persist beyond some installation-defined period of time. Recovery action will be initiated when the resource is brought online. Indoubt resolution will be initiated as part of the process of reconnecting the subsystems.

**DSNR006I** RESTART...COUNTS AFTER BACKWARD

**Explanation:** The message indicates the completion of the backward recovery restart phase. The counts indicate the number of units of work whose recovery actions could not be completed during the phase.

When INFLIGHT or IN ABORT URs do not complete backout during restart, they are converted to POSTPONED ABORT status, so the INFLIGHT and IN ABORT counts should be zero. The POSTPONED ABORT count indicates the number of URs for which backout work still exits (from this or a previous restart).

Backout work for the POSTPONED ABORT URs should be completed by the user (via the -RECOVER POSTPONED command), once DB2 restart has completed.

This message is issued by the following CSECT: DSNRRRAUB

**Operator Response:** No action is required unless the condition persists beyond some installation-defined period of time. Recovery action will be initiated when the resource collection is brought online.

**DSNR007I** RESTART...STATUS TABLE

**Explanation:** This message precedes a table showing the status of units of recovery (URs) after each restart phase. The message and the table will accompany the DSNR004I, DSNR005I, or DSNR006I message after each nested phase. At the end of the current status rebuild phase, it shows the status of any URs that require processing. At the end of the forward recovery and backout phases, it shows the status of only those URs which needed processing but were not processed. The table helps to identify the URs that were active when DB2 came down, and to determine the log scope required to bring DB2 up.

© Copyright IBM Corp. 1982, 1999
The format of the table is shown below:

<table>
<thead>
<tr>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>T</td>
<td>Connection type. The values may be:</td>
</tr>
<tr>
<td>B</td>
<td>Batch: a batch program or OMF user.</td>
</tr>
<tr>
<td>I</td>
<td>Internal: a system service being performed on some user's behalf.</td>
</tr>
<tr>
<td>S</td>
<td>Subsystem: work that originated from an attached subsystem, either CICS or IMS/VS.</td>
</tr>
<tr>
<td>CONID</td>
<td>Connection identifier for related URs. Batch connections are not related to any other connection. Subsystem connections with the same identifier indicate URs that originated from the same subsystem.</td>
</tr>
<tr>
<td>CORRID</td>
<td>Correlation identifier; unique within a subsystem connection, it relates a UR to a particular CICS or IMS/VS transaction.</td>
</tr>
<tr>
<td>AUTHORIZATION ID</td>
<td>Authorization identifier of the user for whom this UR was created.</td>
</tr>
<tr>
<td>PLAN</td>
<td>Name of the plan allocated to the UR.</td>
</tr>
<tr>
<td>S</td>
<td>Restart status of the UR. When DB2 came down, the UR was in one of these situations:</td>
</tr>
<tr>
<td>A</td>
<td>INABORT: The UR was in the 'must-complete' phase of abort, and is yet to be completed.</td>
</tr>
<tr>
<td>C</td>
<td>INCOMMIT: The UR was in the 'must-complete' phase of commit, and is yet to be completed.</td>
</tr>
<tr>
<td>D</td>
<td>INDOUBT: The UR had completed the first phase of commit, but DB2 had not received the second phase instruction. The UR must be remembered so it can be resolved when the owning subsystem reattaches.</td>
</tr>
<tr>
<td>F</td>
<td>INFLIGHT: The UR had not completed the first phase of commit, and will be backed out.</td>
</tr>
<tr>
<td>P</td>
<td>POSTPONED ABORT: The UR has not yet completed backout. Backout must be completed outside of DB2 restart by means of the -RECOVER POSTPONED command.</td>
</tr>
<tr>
<td>URID</td>
<td>UR identifier, the log RBA of the beginning of this unit of work. It is the earliest RBA required to process the UR during Restart.</td>
</tr>
<tr>
<td>DAY</td>
<td>The day the UR was created, in the format 'ddd'. It is approximately the time of the first SQL statement of the application or the first SQL statement following a commit point.</td>
</tr>
<tr>
<td>TIME</td>
<td>The time the UR was created, in the format 'hh mm ss'. It is approximately the time of the first SQL statement of the application or the first SQL statement following a commit point.</td>
</tr>
</tbody>
</table>

This message is issued by the following CSECT: DSNRUDIS

### DSNR009I

**Explanation:** There was not enough storage available during the creation of the recoverable UR (RURE) display table (DSNDRUDT).

**System Action:** The system continues to restart but the RESTART... STATUS TABLE is not displayed.

**System Programmer Response:** Increase the region size of the ssnmMSTR address space before restarting DB2 again.

**Operator Response:** Save the console output and inform the system programmer.

**Problem Determination:** The size requested is approximately 110 bytes for each unit of recovery (UR). See the message DSNR004I to determine the total number of URs to process. Then get the 00E2xxxx reason code from the DSNR009I header. Use these two numbers to determine the reason for the shortage.

### DSNR010I

**Explanation:** There was an error in processing the RURE display table. One of these ERROR LOCATION CODES tells what function the module was attempting to perform:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>X’0001’</td>
<td>Trace entry to the module</td>
</tr>
<tr>
<td>X’0002’</td>
<td>Sort the recoverable UR display table</td>
</tr>
<tr>
<td>X’0003’</td>
<td>Translate the recoverable UR table</td>
</tr>
<tr>
<td>X’0004’</td>
<td>Convert the store clock value for display</td>
</tr>
<tr>
<td>X’0005’</td>
<td>Trace exit from the module</td>
</tr>
</tbody>
</table>

**System Action:** The system continues to restart but the RESTART... STATUS TABLE is not displayed.

**System Programmer Response:** Use the error code in the message to fill in the problem description.

**Operator Response:** Save the console output and inform the system programmer.

**Problem Determination:** The ERROR CODE tells the problem area and should be used in the problem description. A record was added to the SYS1.LOGREC that contains the PSW and module at the time of the error. This error indicates an application program check of some type.

### DSNR011I

**Explanation:** There was an error in processing the RURE display table. One of these ERROR LOCATION CODES tells what function the module was attempting to perform:
**Problem Determination:** The challenge is to select a STARTRBA and/or ENDRBA on the CRESTART control state.

**System Programmer Response:** Use the error code in the message to fill in the problem description.

**Operator Response:** Save the console output and inform the system programmer.

**System Programmer Response:** The ERROR CODE describes the problem area and should be used in the problem description. A record was added to the SYS1.LOGREC containing the value DSNRUDIS, and the PSW and CSECT at the time of the error. This error indicates an application program check of some type.

Error codes other than X’0006’ indicate an application program check of some type. Code X’0006’ indicates an error attempting to locate the table text. The trace entry for DSNRUDIS contains the return and reason codes from the Get Text request. That information should be used to fill in the problem description.

**System Action:** The system continues to restart but the RESTART...STATUS TABLE is not displayed.

**System Programmer Response:** Use the error code in the message to fill in the problem description.

**Explanation:** This is a list of RUREs which are being bypassed because of the conditional restart. Either they were to be processed in a phase that was bypassed or they were outside the log range.

The following shows the format of the table headings. See message DSNR007I for an explanation of the table columns.

**System Action:** Restart continues.

**System Action:** The checkpoint RBA specified in the conditional restart control record (CRCR) is either not available or is not a begin checkpoint record.

**System Programmer Response:** By specifying the STARTTRBA and/or ENDRBA on the CRESTART control statement, change log inventory (DSNJU003) utility selects an appropriate RBA.

**Problem Determination:** Print the complete check point records queue by using the print log map (DSNJU004) utility. Select a check point RBA from this queue or let the change log inventory (DSNJU003) utility make the selection.

**System Programmer Response:** Use DSNR007I for an explanation of the table columns.

**System Programmer Response:** Use DSN1LOGP to determine a STARTTRBA to use for restart. The recovery manager uses the STARTTRBA as a starting point for its search of the beginning of a valid log record.

**System Programmer Response:** To prevent the restart control record from being reused during the next restart attempt, the current restart control record must be canceled. Use the change log inventory (DSNJU003) CRESTART CANCEL option, or create a new restart control record. The newly created restart control record will automatically cancel the previous record.

**System Programmer Response:** This message indicates the range of log processed during the backward phase of restart when postponed backout processing has been requested. Processing began with the LR of RBA  and proceeded backwards to the LR of RBA  in a partial restart when postponed abort URs were processed.

**System Programmer Response:** This message is followed by messages DSNR006I and DSNR007I. The former tells how many URs had some backout work postponed. The latter, identifies the postponed abort URs. The amount of log that need to be processed to complete backout processing for the postponed abort URs can be gauged by comparing the RBA reached during RESTART’s backward processing (RBA  ), and the URIDs of the postponed abort URs.

**System Programmer Response:** During a group restart, the group member issuing this message attempted to access the BSDS for member member, and either was not able to access the BSDS, or discovered that the BSDS was modified by the change log inventory (DSNJU003) utility since that member issued this message attempted to access the BSDS for member member, and either was not able to access the BSDS, or discovered that the BSDS was modified by the change log inventory (DSNJU003) utility since that member was last started. In either case, this DB2 is not able to perform peer restart for member member.

For group restart to continue, the identified member must be started.

If it is not possible to start the other member and you want to terminate this group restart, you can reply ‘NO’ to this message. Replying ‘NO’ to this message causes this DB2 to terminate.
terminate with a reason code of 00D900E1. You then have to reply ‘NO’ to this message for all remaining members participating in this group restart.

If you are sure that the identified member was quiesced the last time it was started, that is, it was stopped with a -STOP DB2 MODE(QUIESCE) command and it stopped with no indoubt units of recovery and no distributed resynchronization responsibility, then you can reply ‘QUIESCED’ to this message. Replying ‘QUIESCED’ to this message causes message DSNR021I to be issued as a reminder that group restart will continue without using the log from the identified member.

**System Action:** This group member waits for the identified member to be started or for a valid reply to this message.

- If the identified member is started, group restart continues.
- If the reply is ‘NO’, this DB2 terminates with a reason code of 00D900E1.
- If the reply is ‘QUIESCED’, group restart continues without using the log from the identified member.

**DSNR021I sect-name DB2 SUBSYSTEM MUST PERFORM GROUP RESTART FOR PEER MEMBERS**

**Explanation:** This DB2 subsystem must perform the group restart phase to recover either the shared communications area (SCA) or the retained locks for nonstarting members in the data sharing group.

This message marks the beginning of group restart processing for peer members. Messages DSNR023I and DSNR024I or messages DSNR025I and DSNR026I are issued for each peer that is processed by this DB2 subsystem. Message DSNR022I marks the end of group restart processing for peer members.

This message is issued before this DB2 member enters the group restart process. The group restart process is synchronized among all group members that are starting and therefore participating in this group restart. After this DB2 member synchronizes with other members, it is possible that no peer processing will be necessary; in that case message DSNR022I immediately follows this message.

If it is necessary to recover both the SCA and retained locks, this message is issued twice; once for SCA recovery and again for the recovery of the retained locks.

**System Action:** The subsystem begins group restart processing.

**DSNR022I sect-name DB2 SUBSYSTEM HAS COMPLETED GROUP RESTART FOR PEER MEMBERS**

**Explanation:** This DB2 subsystem, which previously issued message DSNR021I, completed the group restart phase to recover the shared communications area (SCA) or retained locks for nonstarting DB2 members in the data sharing group.

**System Action:** The subsystem continues with the next restart phase of its own subsystem.

**DSNR023I sect-name GROUP RESTART INITIATED TO RECOVER THE SCA FOR GROUP MEMBER membname**

**Explanation:** The DB2 subsystem that issued this message is performing the group restart phase to recover the shared communications area (SCA) for nonstarting member membname of the data sharing group.

This message is followed by message DSNR024I after the group restart phase to recover the SCA for the identified member is complete.

**System Action:** The subsystem continues the group restart process.

**DSNR024I sect-name GROUP RESTART COMPLETED TO RECOVER THE SCA FOR GROUP MEMBER membname**

**Explanation:** The DB2 subsystem that issued this message completed the group restart phase to recover the shared communications area (SCA) for member membname of the data sharing group.

This message is issued only if messages DSNR021I and DSNR023I were issued.

**System Action:** The subsystem continues the group restart process.

**DSNR025I sect-name GROUP RESTART INITIATED TO RECOVER RETAINED LOCKS FOR GROUP MEMBER membname**

**Explanation:** The DB2 subsystem that issued this message is performing the group restart phase to recover the retained locks for nonstarting member membname of the data sharing group.

This message is followed by message DSNR026I after the group restart phase to recover the retained locks for the identified member is complete.

**System Action:** The subsystem continues the group restart process.

**DSNR026I sect-name GROUP RESTART COMPLETED TO RECOVER RETAINED LOCKS FOR GROUP MEMBER membname**

**Explanation:** The DB2 subsystem that issued this message completed the group restart phase to recover the retained locks for member membname of the data sharing group.

This message is issued only if messages DSNR021I and DSNR025I were issued.

**System Action:** The subsystem continues the group restart process.

**DSNR030I sect-name WILL CONTINUE WITHOUT THE MEMBER MEMBER’S LOG, REPLY ‘YES’ OR ‘NO’**

**Explanation:** The reply to message DSNR020I was ‘QUIESCED’. This message is issued as a reminder that group restart will continue without using the log from the identified member.

If you are sure that the identified member was quiesced the last time it was started, that is, it was stopped with a -STOP DB2 MODE(QUIESCE) command and it stopped with no
indoubt units of recovery and no distributed resynchronization responsibility, then reply ’YES’; otherwise, reply ’NO’.

**System Action:** This group member waits for a valid reply to this message.
- If the reply is ’YES’, group restart continues **without using the log** from the identified member.
- If the reply is ’NO’, message DSNR020I is reissued to allow you to enter a different response.

---

**DSNR031I** csect-name PROCESSING LOG RECORD AT RBA rba1 TO RBA rba2

**Explanation:** This message is produced periodically during the forward and backward processing phases of restart. The RBAs presented in this message can be used to monitor the progress of the phases of restart.

Forward processing occurs between messages DSNR004I and DSNR005I. During forward processing, the log is read in a forward direction.

Backward processing occurs between messages DSNR005I and DSNR006I. During backward processing, the log is read in a backward direction and will stop reading at the RBA matching the URID of the oldest in-flight or in-abort UR.

rba1 is the RBA of the log record currently being processed. rba2 is the RBA of the last log record that will be read in this phase of restart.

**System Action:** DB2 restart continues.

**User Response:** This is an information only message.

---

**DSNR032E** csect-name DB2 IS STARTING AT RELEASE LEVEL code-level-1, WHICH IS NOT COMPATIBLE WITH RELEASE LEVEL code-level-2

**Explanation:** The DB2 you tried to start is not at the proper code release, or does not have the correct fallback/coexistence SPE applied.

**code-level-1** and **code-level-2** are a string of three numeric characters as follows:
- Version
- Release
- Modification level

**code-level-1** The current release level of the starting DB2.

**code-level-2** One of the following:
- In non-data-sharing, the highest release with which this DB2 has ever been started.
- In a data sharing environment, the highest release with which any DB2 in the data sharing group has ever been started. This is known as the group release level.

This message can occur in the following situations:
- The starting DB2 fell back from a later release and does not have the proper fallback SPE applied.
- The starting DB2 does not have the proper coexistence SPE to start in a data sharing group, which is at the higher release level.
- The starting DB2 is at a release in which coexistence with the current group release level is not supported.

**System Action:** DB2 terminates with reason code 00D900FA.

**System Programmer Response:** Verify that:
- Coexistence is supported between the releases you are trying to run.
- The startup procedure is pointing to the correct set of load libraries.
- The correct SPE has been applied.

For more information about what SPE is needed, see the program directory or preventative service planning (PSP) updates.

---

**DSNR033E** csect-name MEMBER member-name IS AT RELEASE LEVEL code-level-1 WHICH IS NOT COMPATIBLE WITH THE STARTING MEMBER AT RELEASE LEVEL code-level-2

**Explanation:** The code level for the started DB2 member and the starting DB2 member are not compatible until you apply the correct SPE to the lower level release.

**code-level-1** and **code-level-2** are a string of three numeric characters as follows:
- Version
- Release
- Modification level

**code-level-1** The release level of the active DB2 member member-name.

**code-level-2** The release level of the starting DB2.

This message occurs when a starting DB2 member is at a higher release than can coexist with an existing DB2 member.

**System Action:** After detecting the first member with which it cannot coexist, DB2 terminates with reason code 00D900FA.

**System Programmer Response:** If you want to start a higher release level of DB2, you must ensure that all active members in the group have the proper SPE applied. If you intended to start a lower release level of DB2, make sure your startup procedure is pointing to the correct set of load libraries.

For more information about what SPE is needed, see the program directory or preventative service planning (PSP) updates.

---

**DSNR034E** csect-name THERE CANNOT BE MORE THAN TWO RELEASE LEVELS OF DB2 RUNNING IN THE GROUP

**Explanation:** You attempted to start a DB2 that was at a release level that cannot coexist in the data sharing group. There are already two different releases of DB2 currently running in the data sharing group.

**System Action:** DB2 terminates.

**System Programmer Response:** If you are sure that the startup procedure is pointing to the correct set of load libraries, you must stop any DB2 subsystems that cannot coexist with the one you are attempting to start.

See DB2 Data Sharing: Planning and Administration for more information about release coexistence in a data sharing group.
**DSNR035I**  csect-name WARNING - UNCOMMITTED UR AFTER nn CHECKPOINTS - CORRELATION NAME = xxxxxxxxxx CONNECTION ID = yyyyyyyyyy LUWID = logical-unit-of-work-id\(\text{token}\) PLAN NAME = xxxxxxxxxx AUTHID = xxxxxxxx END USER ID = xxxxxxxx TRANSACTION NAME = xxxxxxxx WORKSTATION NAME = xxxxxxxx

**Explanation:** This message indicates that during checkpoint, DB2 encountered an uncommitted UR that has an INFLIGHT status.

The value \(nn\) is cumulative, and it indicates the number of checkpoints taken since the beginning of the UR. **CORRELATION** name, **CONNECTION ID**, and **LUWID** together identify a thread associated with the UR. If the **LUWID** is an \("\ast\)\", it indicates that the thread originated at this site. \(\text{token}\) is a unique token number associated with the LUWID. **PLAN NAME** and **AUTHID** further identify the thread associated with the UR. If the thread was created with client End User information, the End User's **ID**, **TRANSACTION NAME**, and **WORKSTATION NAME** will be displayed. Otherwise, these fields will contain an \("\ast\)\".

**System Action:** DB2 continues processing. If statistics class 3 is turned on, IFCID 0313 is written.

**System Programmer Response:** Consult with the application programmer to determine if this is a problem UR. See Section 4 (Volume 1) of **DB2 Administration Guide** for more information about problems caused by uncommitted URs. If the UR is caused by an application program, you can use CANCEL THREAD to delete the UR, if necessary. If an uncommitted UR is deleted, DB2 will undo the changes. The amount of time required for this process depends on the amount of work done by the UR.

**Programmer Response:** Ensure that the application commits frequently enough, or consult with your DB2 administrator about decreasing the frequency of the check.

**DSNR036I**  csect-name UNRESOLVED UR ENCOUNTERED DURING CHECKPOINT - CORRELATION NAME = xxxxxxxxxx CONNECTION ID = yyyyyyyyyy LUWID = logical-unit-of-work-id PLAN NAME = xxxxxxxxxx AUTHID = xxxxxxxx

**Explanation:** DB2 has detected an INDOUBT unit of recovery (UR) during a checkpoint. The purpose of this message is to remind the operator that an INDOUBT UR or POSTPONED ABORT UR exists.

**CORRELATION name, CONNECTION ID, and LUWID** together identify a thread associated with the UR. If the **LUWID** is an \("\ast\)\", it indicates that the thread originated at this site. **PLAN NAME** and **AUTHID** further identify the thread associated with the indoubt UR.

**System Action:** DB2 continues processing. If statistics class 3 is turned on, IFCID 0313 is written.

**System Programmer Response:** Consult with the application programmer to determine whether this is a problem UR. See Section 4 (Volume 1) of **DB2 Administration Guide** for more information about resolving INDOUBT URs.

**DSNR037I**  csect-name WARNING - THE TCP/IP DRDA PORT NUMBER IS CHANGED FROM port_1 TO port_2

**Explanation:** The TCP/IP DRDA port number specified in the DB2 BSDS is different from the value used the last time a member of the DB2 data sharing group started. All members of a DB2 data sharing group must use the same TCP/IP DRDA port number.

**port_1** The TCP/IP DRDA port number that was obtained from the DB2 BSDS during DB2 startup.

**port_2** The TCP/IP DRDA port number that was obtained from the coupling facility during DB2 startup. This is the TCP/IP DRDA port number that was used the last time a member of the data sharing group was started.

**System Action:** DB2 accepts the new TCP/IP DRDA port number, and DB2 startup continues.

**Operator Response:** Contact the system programmer.

**System Programmer Response:** If the TCP/IP DRDA port number was changed inadvertently, stop DB2 immediately. Use the change log inventory utility (DSNJU003) to correct the PORT value, and restart DB2.

If this message reflects a change that you want to make to DB2's DRDA port number, no action is required. The DRDA port number stored in the coupling facility is updated, and this new port number will be used when DB2 validates each member's DRDA port number.

**DSNR038I**  csect-name WARNING - THE TCP/IP RESYNCHRONIZATION PORT NUMBER IS CHANGED FROM port_1 TO port_2

**Explanation:** The TCP/IP resynchronization port number obtained from the DDF record of the BSDS is different than the value specified the last time DB2 started.

Changing the TCP/IP resynchronization port number can cause problems during distributed 2-phase commit processing. Remote DRDA partners record DB2's resynchronization port number in their recovery logs. The resynchronization port number is used to reconnect to the appropriate DB2 member when communication failures occur during 2-phase commit processing. If a DB2 member changes its resynchronization port number, the remote DRDA partners may be unable to resolve indoubt units of work.

**port_1** The TCP/IP resynchronization port number that was obtained from the DB2 BSDS during DB2 startup.

**port_2** The TCP/IP resynchronization port number that was obtained from the coupling facility during DB2 startup. This is the TCP/IP resynchronization port number that was used the last time this member was started.

**System Action:** DB2 accepts the new TCP/IP resynchronization port number, and DB2 startup continues.

**Operator Response:** Contact the system programmer.

**System Programmer Response:** If the DB2 resynchronization port number was changed inadvertently, stop DB2 immediately. Use the change log inventory utility (DSNJU003) to correct the RESPORT value, and restart DB2.
If this message reflects a change that you want to make to
DB2's resynchronization port number, no action is required.
The resynchronization port number stored in the coupling
facility for this member is updated, and this new port number
will be used when DB2 validates the resynchronization port
number for other DB2 members.

**DSNR039I**  csect-name WARNING - TCP/IP RESYNCHRONIZATION PORT NUMBER port_1 IS THE SAME AS MEMBER member_name

**Explanation:** The TCP/IP resynchronization port of the starting DB2 is the same as the member indicated by member_name.

- **port_1**: The TCP/IP resynchronization port number that was obtained from the DB2 BSDS during DB2 startup.
- **member_name**: The member name of the DB2 data sharing member that used the same resynchronization port number.

**System Action:** The TCP/IP port number specified in the BSDS is accepted, and DB2 startup continues.

**Operator Response:** Contact the system programmer.

**System Programmer Response:** Each member of the DB2 data sharing group should have a unique TCP/IP resynchronization port number. Use the change log inventory utility (DSNJU003) to specify a unique RESPORT value for this DB2 member and the DB2 member identified by member_name.

**DSNR040I**  csect-name TRACKER RESTART ENDLRSN lrsn DOES NOT MATCH ENDLRSN lrsn ASSOCIATED WITH THE DATA SHARING GROUP

**Explanation:** In a data sharing environment, a TRKRSITE DB2 will not restart if it detects inconsistencies in the reported values for ENDLRSN. The ENDLRSN specified on the Conditional Restart Control Record does not match the ENDLRSN in the system communications area (SCA) structure for the data sharing group.

**System Action:** DB2 startup terminates.

**Operator Response:** Collect the SYS1.LOGREC and SVC dump, and contact the system programmer.

**System Programmer Response:** If the ENDLRSN value for this member is incorrect, take the following actions:

- Restore the BSDS and Logs for his Tracker DB2 from the primary DB2
- Ensure the Conditional Restart Control Record is correct
- Restart DB2

If the ENDLRSN value in the SCA is incorrect, delete the SCA structure and restart all members of the TRKRSITE data sharing group with the same ENDLRSN.
DSNT... Messages

Messages issued by DSNTINST, DSNTINS1, and DSNTINS2 installation CLISTs have an internal severity level as follows:

0  Successful execution: CLIST progress and tracing messages (processing continues)
4  Warning: some adjustments might be made by the installation CLISTs (processing and JCL editing continues)
8  Error: unable to continue (no JCL is edited)

**Explanation:**

**DSNT101I**

A VSAM ERROR HAS BEEN ENCOUNTERED WHILE CSECT DSNTSTR2 WAS READING THE DB2 BSDS VSAM RETURN CODE = x, VSAM REASON CODE = y

**System Action:** The up process continues. However, any references to password-protected system databases will cause a resource unavailable error. Any agent-related requests for subsystem database resources will result in an SQLCODE -904. Any requests that are not agent-related for unavailable resources will result in the following messages:

- DSN0001
- DSN0002
- DSN0003
- DSN0004
- DSN1005
- DSN1006
- DSN4106
- DSN4141
- DSN4141
- DSN4151
- DSN4161
- DSN4171
- DSN5001

Abend X’04E’ with reason code X’00E30010’ is also produced. However, the error results in a retry. DB2 does not terminate, but a dump is produced.

**Operator Response:** Notify the system programmer.

**System Programmer Response:**

Obtain a copy of SYS1.LOGREC and the SVC dump. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** This message is generated when the recovery log manager (RLM) subcomponent of DB2 encounters an invalid DB2 database services password record. A copy of the BSDS record with key ’200000001’, which is the invalid database services record retrieved, should be obtained.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2, 5, 16.

**DSNT103I**

THE CURRENTLY LOADED DSN6SPRM IS NOT THE MVS/XA VERSION

**Explanation:**

A -START DB2 PARM=xxxxxxxx was issued, where ‘xxxxxxxx’ is the version of the system parameter CSECTs. DB2 executes in a MVS/XA environment and will not execute in any other environment.

**System Action:** The message DSNV086E is generated with a reason code of X’00E30008’. DB2 is terminated with abend code X’04F’.

**Operator Response:** Notify the system programmer.

**System Programmer Response:**

Restart DB2 with a -START DB2 PARM= command, where the parameter block that follows the PARM= parameter specifies an MVS/XA version of the DB2 subsystem parameters.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2, 3, 5, 9.

**DSNT104I**

THE CURRENTLY LOADED DSN6SPRM IS NOT THE MVS/370 VERSION

**Explanation:**

A -START DB2 PARM=xxxxxxxx was issued, where ‘xxxxxxxx’ is the version of the system parameter CSECTs. DB2 executes in an MVS/370 environment and does not execute in any other environment.

**System Action:** Message DSNV086E is generated with reason code X’00E30009’. DB2 is terminated with abend code X’04F’.

**Operator Response:** Notify the system programmer.

**System Programmer Response:**

Restart DB2 with a -START DB2 PARM= command, where the parameter block that follows the PARM= parameter specifies an MVS/370 version of the DB2 subsystem parameters.
DSNT105I • DSNT201I

Problem Determination: Collect the following diagnostic
items listed in Appendix B, “Problem determination” on
page 1051 1, 2, 3, 5, 9.

DSNT105I  THE LOADED DSN6SPRM CSECT IS OBSO-
LETE. PLEASE REASSEMBLE THE
DSN6SPRM CSECT AND RELINKEDIT THE
DSNZPARM LOAD MODULE.

Explanation: DSNTSTR2 loaded an out-of-date system
parameter CSECT DSN6SPRM. This error can only occur if
code maintenance has been applied and CSECT DSN6SPRM
has not been reassembled. This CSECT is contained in the
load module specified in the ‘PARM=’ parameter of the
-SSTART DB2 command.

System Action: The message DSNV086E is generated with
a reason code of X’00E30008’. DB2 is terminated with abend
code X’04F’.

Operator Response: Notify the system programmer.

System Programmer Response: Reassemble DSN6SPRM,
and relink-edit the DSNZPARM load module. This is done by
resubmitting the install job stream, DSNTIJUZ, that built the
load module that is named following the ‘PARM=’ parameter of
the -START DB2 command.

Problem Determination: Collect the following diagnostic
items listed in Appendix B, “Problem determination” on
page 1051 1, 2, 3, 5, 9.

DSNT200I  type bind-type FOR PLAN plan-id SUCCESSFUL

Explanation: A BIND, REBIND or FREE PLAN subcommand
has completed successfully.

<table>
<thead>
<tr>
<th>type</th>
<th>Indicates that a test bind was in progress. A test bind means that no plan name was specified. The token is omitted if a normal BIND PLAN was processed.</th>
</tr>
</thead>
<tbody>
<tr>
<td>bind-type</td>
<td>Type of bind subcommand: BIND, REBIND, or FREE.</td>
</tr>
<tr>
<td>plan-id</td>
<td>Name of application plan specified in the subcommand.</td>
</tr>
</tbody>
</table>

System Action: The plan was successfully bound, rebound,
or freed.

DSNT201I  type bind-type FOR PLAN plan-id NOT SUC-
CESSFUL

Explanation: Errors have been detected during the proc-
essing of the indicated BIND, REBIND, or FREE PLAN sub-
command.

<table>
<thead>
<tr>
<th>type</th>
<th>Indicates that a test bind was in progress. A test bind means that no plan name was specified. The token is omitted if a normal BIND PLAN was processed.</th>
</tr>
</thead>
<tbody>
<tr>
<td>bind-type</td>
<td>Type of bind subcommand: BIND, REBIND, or FREE.</td>
</tr>
<tr>
<td>plan-id</td>
<td>Name of application plan specified in the subcommand.</td>
</tr>
</tbody>
</table>

System Action: The BIND, REBIND, or FREE PLAN was not
executed.

System Programmer Response: See other messages
issued to determine the error that caused the bind subcom-
mand to terminate unsuccessfully.

DSNT106I  THE LOADED DSN6SYSP CSECT IS OBSO-
LETE. PLEASE REASSEMBLE THE
DSN6SYSP CSECT AND RELINKEDIT THE
DSNZPARM LOAD MODULE.

Explanation: DSNTSTR2 loaded an out-of-date system
parameter CSECT DSN6SYSP. This error can only occur if
code maintenance has been applied and CSECT DSN6SYSP
has not been reassembled. This CSECT is contained in the
load module specified in the ‘PARM=’ parameter of the
-SSTART DB2 command.

System Action: The message DSNV086E is generated with
a reason code of X’00E30008’. DB2 is terminated with abend
code X’04F’.

Operator Response: Notify the system programmer.

System Programmer Response: Reassemble DSN6SYSP,
and relink-edit the DSNZPARM load module. This is done by
resubmitting the install job stream, DSNTIJUZ, that built the
load module that is named following the ‘PARM=’ parameter of
the -START DB2 command.

Problem Determination: Collect the following diagnostic
items listed in Appendix B, “Problem determination” on
page 1051 1, 2, 3, 5, 9.

DSNT107I  INVALID AMODE OR RMODE ATTRIBUTE
FOUND FOR LOAD MODULE module-name

Explanation: During DB2 startup, the service controller
establishes the addressability to the DB2 database services
functional recovery and the emergency shutdown routines. Two
load modules, DSNTF, and DSNTLCLE, are loaded into CSA.
In the MVS/XA environment, DSNTLCLE must be link-edited
with attributes AMODE(24) and RMODE(ANY). At least one of
the modules did not have the correct addressing attribute when
it was loaded. ‘module-name’ in the error message is the
name of the first load module that has an invalid addressing
mode.

System Action: DB2 database services start up is termi-
nated.

Operator Response: Notify the system programmer.

System Programmer Response: Verify that all install and
maintenance activities against these modules were executed
using SMP. Verify that the JCLIN for SMP includes the correct
AMODE and RMODE control statements, and that the linkage
editor provided with the Data Facility Product (DFP) was
invoked by SMP for the link edits. Correct the procedure or
JCL which caused the error and rerun the necessary SMP
jobs.

Problem Determination: A DB2 dump was requested to an
MVS/XA SYS1.DUMP data set.

The MVS service aid AMBLIST provides linkage editor module
attributes in the summary section of the LISTLOAD function
output.

DSNT201I  type bind-type FOR PLAN plan-id NOT SUC-
CESSFUL
**DSNT202I  MESSAGE LIMIT EXCEEDED**  
**Explanation:** A fixed amount of space exists in which to generate bind subcommand messages. This message says that the bind subcommand generated more messages than will fit in that space.  
**System Action:** For bind subcommands that affect a single plan, the bind subcommand process continues. However, no other messages are generated except for message DSNT200I or DSNT201I. For bind subcommands that affect more than one plan, the bind subcommand process terminates and no other messages are generated.  
**System Programmer Response:** The ‘FLAG’ parameter of the bind subcommand can be used to limit the types of messages that are generated.

**DSNT205I  name IS A DUPLICATE name-type, IT WILL BE USED ONLY ONCE**  
**Explanation:** Name ‘name’ has been specified more than once in a list of names.  
**name**  
Name that was specified more than once.  
**name-type**  
Indicates the type of list in which the name was duplicated.  
- MEMBER NAME - List of DBRM Members  
- PLAN-ID - List of plan IDs  
- SYSTEM NAME - List of system connection names on a DISABLE or ENABLE list.  
- PACKAGE NAME - List of package IDs  
**System Action:** Duplicates are removed from ‘name-type’ list and the bind process continues.  
**System Programmer Response:** Verify the list that contains the duplicate. If the error is only in entering a name incorrectly, which happens to duplicate another entry, enter the name correctly and reissue the bind statement. If the entry is really a duplicate, no action is required.

**DSNT207I  PROGRAM program-name WITH MARK release-dependency-mark FAILED BECAUSE IT DEPENDS ON FUNCTIONS OF THE RELEASE FROM WHICH FALL BACK HAS OCCURRED**  
**Explanation:** Program ‘program-name’ depends on a function of DB2 that is not supported by the current active release.  
**program-name**  
Name of the application program.  
**release-dependency-mark**  
A one-character mark showing the oldest DB2 release supporting this program.  
This message is issued by the following CSECTs: DSNTBCM1, DSNTBCM2  
**System Action:** The bind operation for this plan or package is not performed.  
**User Response:** The program cannot be used until the DB2 subsystem is remigrated to the newer release. Notify the system programmer.  
**System Programmer Response:** Warn users not to use plans or packages containing this program until the DB2 subsystem has been remigrated to the newer release.

**DSNT208I  PROGRAM program-name PRECOMPiled WITH INCORRECT LEVEL FOR THIS RELEASE**  
**Explanation:** Program ‘program-name’ was precompiled under a release not supported by the current level of DB2, or the contents of the DBRM have been modified after the pre-compilation phase.  
**System Action:** The BIND operation was not performed.  
**User Response:** Precompile the named program again using the current precompiler. Reissue the BIND command.  
**Problem Determination:** If the application program was precompiled at an appropriate release, and the problem persists, collect the following diagnostic items listed in [Appendix B.](#)  
[Problem determination](#) on page 1051: 79, 80, 81.

**DSNT209I  bind-type FOR PLAN plan-id WITH MARK release-dependency-mark FAILED BECAUSE PLAN DEPENDS ON FUNCTIONS OF THE RELEASE FROM WHICH FALL BACK HAS OCCURRED.**  
**Explanation:** Plan ‘plan-id’ depends on a function of DB2 which is not supported by the currently active release.  
**bind-type**  
REBIND  
**plan-id**  
Name of the application plan  
**release-dependency-mark**  
A one-character mark showing the oldest release of DB2 which can support this plan. The release dependency mark for the plan is kept in the IBMREQD columns in the DB2 catalog in SYSTBMS.SYSPLAN.  
**System Action:** The REBIND operation for this plan is not performed.  
**User Response:** The plan cannot be used until the DB2 subsystem is remigrated to the newer release.  
**Operator Response:** Notify the system programmer.  
**System Programmer Response:** Warn users not to use the plan until the DB2 subsystem has been remigrated to the newer release.

**DSNT210I  bind-type AUTHORIZATION ERROR USING authorization-id AUTHORITY PLAN=plan-id PRIVILEGE=privilege**  
**Explanation:** The indicated authorization ID does not have the indicated privilege and therefore cannot invoke the indicated BIND subcommand against the indicated application plan.  
**bind-type**  
Type of BIND subcommand: BIND, REBIND, FREE.  
**authorization ID**  
Authorization ID of the plan owner.  
**plan-id**  
Application plan specified in the BIND subcommand.  
**privilege**  
Missing privilege: BIND, BINDADD  
**System Action:** The BIND, REBIND, or FREE operation for ‘plan-id’ is not performed.  
**System Programmer Response:** If the indicated privilege is BINDADD, then the privilege to invoke the BIND subcommand with the ACTION(ADD) option must be granted to the indicated...
authorization ID. If the indicated privilege is BIND, the privilege
to invoke a BIND subcommand against the indicated applica-
tion plan must be granted to the indicated authorization ID.

DSNT211I  REBIND FOR PLAN plan-id FAILED BECAUSE
IBMRREQD OF ibmreqd IS INVALID
Explanation: The I BMREQD column of the
SYSIBM.SYSPLAN catalog table for the named plan contains
an unrecognized character.
System Action: The REBIND operation for the plan was not
performed.
System Programmer Response: You must do a BIND
ACTION(REPLACE) for this plan.

DSNT212I  bind-type AUTHORIZATION ID auth-id IN THE
OWNER KEYWORD IS INVALID
Explanation: The authorization ID specified in the OWNER
keyword of the BIND or REBIND subcommand is invalid. To
specify an OWNER that is not the primary authorization ID, or
one of the secondary IDs of the process requires additional
authority. See DB2 Command Reference for the authority
required.
bind-type Type of bind subcommand: BIND or
REBIND
auth-id The authorization ID specified as owner.
System Action: The BIND or REBIND subcommand is not
executed.
System Programmer Response: Rerun the subcommand
and specify a valid authorization ID for the OWNER keyword.
You may need to add the required authorization ID for this
user to the security system.

DSNT213I  THE DCB BLOCK SIZE OF THE INPUT DBRM
LIBRARY IS INVALID
Explanation: An invalid DCB block size is specified for the
DBRM library of the BIND subcommand.
System Programmer Response: Correct the DCB block size
of the DBRM library, and reissue the BIND subcommand.

DSNT214I  I/O ERROR ON DBRM LIBRARY DBRM
MEMBER= dbrm-name DBRM LIBRARY= dbrm-
pds-name xxxxxx
Explanation: An I/O error was encountered attempting to
read database request module (DBRM) during a BIND sub-
command. ‘xxxxxx’ is a portion of the message text generated
by the SYNADAF macro instruction to describe the permanent
I/O error. This text may contain information such as jobname,
stepname, unit address, device type, ddname, operation
attempted, and error description.
dbrm-name Name of the DBRM associated with the
error.
dbrm-pds-name Partitioned data set associated with the
error.
System Action: No application plan is created.
System Programmer Response: Determine if an incorrect
dbpm-pds-name was specified in the LIBRARY parameter of
the BIND subcommand, or an incorrect data set name was
specified for the DBRMLIB DD statement. Check correctly
specified data sets for I/O errors or modified DCB attributes.

DSNT220I  BIND ADD ERROR USING auth-id AUTHORITY
PLAN plan-id ALREADY EXISTS
Explanation: An attempt was made to use the BIND subcom-
mand with the ‘ACTION(ADD)’ option that specified a
‘plan-id’ that already exists.
auth-id Authorization ID of the owner of the plan.
plan-id Application plan specified in the BIND
subcommand.
System Action: No application plan is created.
System Programmer Response: Check the SYSPLAN
catalog table for names of existing applica-
tion plans. Reinvoke the BIND subcommand with a ‘plan-id’
that is not in use.

DSNT221I  bind-type ERROR USING auth-id AUTHORITY
PLAN plan-id DOES NOT EXIST
Explanation: The indicated bind subcommand was issued
against an application plan that does not exist. The individual
variable fields contain:
bind-type Type of bind subcommand: REBIND or
FREE.
auth-id Authorization ID of the plan owner.
plan-id Application plan specified in the BIND
subcommand.
System Programmer Response: Check the SYSPLAN
catalog table for the correct ‘plan-id’ to use.

DSNT222I  csect-name bind-type WARNING FOR object-
type = object-name USE OF OPTHINT IS DISAL-
LOWED BY A DB2 SUBSYSTEM PARAMETER.
The DEFAULT OPTHINT VALUE IS USED.
Explanation: The DB2 subsystem parameters have not been
configured to enable the use of OPTHINT in the bind-type
command. The default OPTHINT value of all blanks is used.
bind-type Type of BIND subcommand: BIND or
REBIND.
object-type PLAN or PACKAGE
object-name If object-type is PLAN, object-name is the
name of the plan.
If object-type is PACKAGE, object-name is the
name of the package in the format
’location-id.collection-id.package-id’.
System Action: Processing continues normally using the
default OPTHINT value.
System Programmer Response: Enable the use of
OPTHINT by changing the value of OPTIMIZATION HINTS on
the DB2 Installation panel, DSNTIP4.
If, after further consideration, you do not want to use
OPTHINT, remove OPTHINT from the bind-type subcommand
or set the value to all blanks.
**DSNT228I** BIND ERROR, ATTEMPTING TO REPLACE PACKAGE = package_name WITH VERSION = (version2) BUT THIS VERSION ALREADY EXISTS

**Explanation:** An attempt is made to create a version of a package that already exists. The version specified in the REPLVER keyword is different from the version specified for the precompile. The version specified for the precompile already exists in the catalog. The combination of 'location.collection.package.version' must be unique in the SYSIBM.SYSPACKAGE catalog table. A common mistake is that the user may believe that the version he is creating is the one specified in the REPLVER keyword. This is not the case. The version specified in the REPLVER keyword is the name of the version being replaced. The version that will be created is the version that was given to the program when it was precompiled.

**System Programmer Response:**

- **FREE** the package first and then **BIND** the package.

**DSNT229I** BIND ERROR, ATTEMPTING TO REPLACE PACKAGE = package-name THERE ARE ENABLE OR DISABLE ENTRIES CURRENTLY ASSOCIATED WITH THE PACKAGE

**Explanation:** The BIND subcommand was issued to replace a package that has ENABLE or DISABLE entries currently associated with the package. The individual variable fields contain:

<table>
<thead>
<tr>
<th>field</th>
<th>description</th>
</tr>
</thead>
<tbody>
<tr>
<td>package-name</td>
<td>Name of the package</td>
</tr>
<tr>
<td>(location.collection.package)</td>
<td></td>
</tr>
</tbody>
</table>

**System Action:** The package was not bound.

**System Programmer Response:** FREE the package first and then BIND the package.

**DSNT230I** BIND DBRM MEMBER NAME ERROR USING auth-id AUTHORITY object-type = object-name DBRM dbrm-name NOT FOUND IN PDS SEARCH ORDER

**Explanation:** The indicated 'dbrm-name' was not found in the search order in the PDSs specified on the BIND PLAN or BIND PACKAGE subcommand.

<table>
<thead>
<tr>
<th>field</th>
<th>description</th>
</tr>
</thead>
<tbody>
<tr>
<td>auth-id</td>
<td>Authorization ID of the invoker of the BIND subcommand.</td>
</tr>
<tr>
<td>object-type</td>
<td>The type of object being bound: PLAN or PACKAGE</td>
</tr>
<tr>
<td>object-name</td>
<td>If 'object-type' is PLAN, 'object-name' is the name of the application plan. Otherwise, it is the name of the package in 'location.collection.package'. format.</td>
</tr>
<tr>
<td>dbrm-name</td>
<td>Name of the DBRM that is in error.</td>
</tr>
</tbody>
</table>

**System Action:** The package was successfully bound, rebound, or freed.

**System Programmer Response:** Precompile the application program associated with the indicated DBRM. Reinvoke the BIND subcommand.

**DSNT231I** UNSUCCESSFUL bind-type FOR PACKAGE = package-name

**Explanation:** Errors have been detected during the processing of the indicated BIND, REBIND, or FREE PACKAGE subcommand.

<table>
<thead>
<tr>
<th>field</th>
<th>description</th>
</tr>
</thead>
<tbody>
<tr>
<td>bind-type</td>
<td>Type of bind subcommand: BIND, REBIND, or FREE</td>
</tr>
<tr>
<td>package-name</td>
<td>Name of the package in the following format: 'location.collection.package.(version)'</td>
</tr>
</tbody>
</table>

**System Action:** The indicated package was not bound, rebound, or freed.

**System Programmer Response:** See other messages issued to determine the error that caused the subcommand to terminate unsuccessfully.
**DSNT234I • DSNT235I**

**DSNT234I MESSAGE LIMIT EXCEEDED**

**Explanation:** A fixed amount of space exists in which to generate bind subcommand messages. This message says that the bind subcommand generated more messages than will fit in that space.

**System Action:** For bind subcommands that affect a single package, the bind subcommand process continues. However, no other messages are generated except for completion message DSNT232I or DSNT233I. For bind subcommands that affect more than one package, the bind subcommand process terminates and no other messages are generated.

**System Programmer Response:** The 'FLAG' parameter of the bind subcommand may be used to limit the types of messages that are generated.

---

**DSNT235I csect-name bind-type AUTHORIZATION ERROR USING auth-id AUTHORITY PACKAGE = package-name PRIVILEGE = privilege**

**Explanation:** The authorization ID given does not have the privilege indicated and cannot invoke the bind subcommand on the named package.

**bind-type** Type of bind subcommand: BIND, REBIND, or FREE

**auth-id** Authorization ID of of the package owner

**package-name** Name of the package in the following format: 
'location.collection.package.(version)'

**privilege** Name of the privilege not held:
- BINDADD or BINDADD *
  - The authority to create a new package using BIND with the ADD option.
- BIND *
  - The authority to add a new version of an existing package using BIND with the ADD option.
- FREE
  - There is no FREE privilege, but the user needs the proper authority to free the package.
- COPY
  - The authority to COPY from the indicated package.
- CREATE IN or CREATE IN *
  - The authority to create a package in the indicated collection.

A blank and asterisk (*) in the privilege values ‘BINDADD ‘*, ‘BIND ‘*, and ‘CREATE IN ‘* in the message indicates that the DB2 system parameter BIND NEW PACKAGE has the value BIND. When ‘* ‘ does not appear in these privilege values, BIND NEW PACKAGE has the value BINDADD.

The system parameter BIND NEW PACKAGE affects the authorization required to add a new package or a new version of an existing package to a collection. For more information about this system parameter, see:

- "Installing, Migrating, and Updating System Parameters" (Panel: DSNTIPP) in Section 2 of DB2 Installation Guide.

---

**DSNT236I REBIND FOR PACKAGE package-name FAILED BECAUSE IBMREQD of ibmreqd IS INVALID**

**Explanation:** The IBMREQD column of the SYSIBM.SYSPACKAGE catalog table for the named package contains an unrecognizable character. This usually means that the package depends on a function of DB2 which is not supported by the currently active release.

This message is issued by the following CSECT: DSNTBRB2

**System Programmer Response:** You must grant the indicated privilege to the authorization ID of the package owner.

---

**DSNT237I csect-name BIND sub-type ERROR USING auth-id AUTHORITY PACKAGE = package-name ALREADY EXISTS**

**Explanation:** An attempt is made to add a package that already exists. The combination of 'location.collection.package version' must be unique in the SYSIBM.SYSPACKAGE table. In addition, the combination of 'location.collection.package consistency-token' must be unique.

**sub-type** The sub-type can have the values: COPY, ADD or REPLACE.

**auth-id** Authorization ID of the owner of the package.

**package-name** Name of the package in the following format: 
'location.collection.package.(version)'

**System Action:** No package is created.

**System Programmer Response:** Check the SYSIBM.SYSPACKAGE catalog table for names of existing application packages. Re-invoke the BIND subcommand with a 'location.collection.package version' that is not in use.

---

**DSNT238I bind-type error-type USING auth-id AUTHORITY PACKAGE = package-name DOES NOT EXIST**

**Explanation:** The indicated subcommand was issued against a package that does not exist. The individual variable fields contain:

**bind-type** Type of bind subcommand (BIND COPY | BIND REPLACE | REBIND | FREE | BIND PLAN | REBIND PLAN | DROP PACKAGE). If BIND or REBIND PLAN is specified, the package-name refers to a package on the PKLIST for the plan.

**error-type** Type of error: WARNING or ERROR.
auth-id Authorization ID of the invoker of the BIND subcommand.

package-name Name of the package in the following format 'location.collection.package.(version)'.

System Action: Package not rebound or freed.
System Programmer Response: Check the SYSPACKAGE catalog table for the correct 'location.collection.package.version' to use.

---

DSNT239I PLAN plan-id CONTAINS NO DBRMS AND NO PACKAGES

Explanation: A plan with no DBRMs was rebound with the NOPKLIST option specified. This creates an empty plan. No SQL can be executed. The individual variable fields contain:

plan-id Plan name specified on the REBIND command.

System Action: This is a warning message. The REBIND process will continue.
System Programmer Response: If an empty plan is not desired, reissue the REBIND command with the PKLIST keyword specifying a new list.

---

DSNT240I csect-name bind-type ERROR, ASTERISK NOT ALLOWED ON REMOTE bind-type PACKAGE

Explanation: When remotely rebinding or freeing a package, an asterisk (*) cannot be specified anywhere in the name of a package. In other words, it is not possible to remotely rebind or free multiple packages.

System Programmer Response: Remove the asterisk and rebind, or free a specific package. Refer to DB2 Command Reference for the correct syntax for REBIND or FREE PACKAGE.

---

DSNT241I bind-type AUTHORIZATION error-type ON PLAN plan-id AUTHORIZATION ID auth-id NOT AUTHORIZED TO EXECUTE PACKAGE package-name

Explanation: The indicated authorization ID does not have EXECUTE authority on the specified package in the package list.

bind-type Type of bind subcommand: BIND or REBIND
error-type Type of error: WARNING or ERROR. If VALIDATE(BIND) was specified, this is an ERROR message. Otherwise, it is a WARNING message.
plan-id Name of application plan specified in the subcommand.
auth-id Authorization ID of the plan owner.
package-name Name of the package (collection.package). The location of the package is the local DB2 location name.

System Action: If the bind subcommand was invoked with VALIDATE(BIND), the BIND or REBIND operation is not performed. If VALIDATE(RUN) was used then the BIND or REBIND operation will continue.
System Programmer Response: The indicated plan owner should be granted the EXECUTE privilege on the package.

---

DSNT242I bind-type ERROR USING auth-id AUTHORITY NO BIND OR REBIND SUBCOMMANDS ARE ALLOWED FOR THIS AUTHID

Explanation: The authorization ID is not allowed to perform the indicated *bind-type* against a plan or package because entries in the RLST table prohibit binding and rebinding by this authorization ID, or all authorization IDs.

bind-type Type of bind subcommand: BIND or REBIND
auth-id Authorization ID of the plan or package owner.

System Action: The plan or package is not bound or rebound.
System Programmer Response: If the indicated authorization ID should be allowed to bind, change the entry in the active RLST table.

---

DSNT243I BIND ERROR FOR PACKAGE = pkg-id CONTOKEN = 'contoken' IS NOT UNIQUE SO IT CANNOT BE CREATED

Explanation: An attempt is made to add or replace a package with a consistency token that is not unique for that package. In other words, the combination of 'location.collection.package.consistency-token' already exists.

pkg-id Fully qualified name of the package.
contoken Consistency token in hexadecimal.

System Action: The BIND will fail.
System Programmer Response: Check the SYSIBM.SYSPACKAGE catalog table for names of existing application packages with the indicated consistency token. Reissue the BIND subcommand such that the 'location.collection.package.consistency-token' is unique within the catalog. The following SQL statement can be used to query the catalog,

```
SELECT COLLID,NAME FROM loc-id.SYSIBM.SYSPACKAGE WHERE HEX(CONTOKEN) = 'contoken';
```

---

DSNT244I bind-type ERROR keyword KEYWORD IS NOT SUPPORTED FOR REMOTE PROCESSING

Explanation: The indicated keyword is not supported for the remote bind or rebind subcommand.

bind-type Type of bind subcommand: BIND or REBIND
keyword Name of the keyword that is not supported.

Programmer Response: Check DB2 Command Reference for the correct syntax.

---

DSNT245I LOCATION location CANNOT BE SPECIFIED. THE LOCAL DB2 IS NOT DEFINED

Explanation: Since the local DB2 location name is undefined, no location name may be given when specifying a package name on a bind subcommand.

location Location specified on the bind subcommand.

System Action: The bind subcommand was not performed.
System Programmer Response: The location name of the local DB2 must be defined in BSDS if the location is used in the BIND, REBIND, or FREE subcommand.
**DSNT246I**  
*bind-type FOR PACKAGE*  
*package-name WITH*  
*MARK release-dependency-mark FAILED*  
*BECAUSE PACKAGE DEPENDS ON FUNCTION*  
*OF THE RELEASE FROM WHICH FALL BACK HAS OCCURRED*  

**Explanation:** The named package depends on a function of DB2 which is not supported by the currently active release.

- **bind-type**: Type of bind subcommand: REBIND
- **package-name**: Name of the package in the following format:  
  `location.collection.package.(version)`  
- **release-dependency-mark**: A one-character mark showing the oldest release of the DB2 which can support this package. The release dependency mark for the package is kept in the IBMREQD column in the DB2 catalog in SYSIBM.SYSPACKAGE.

**System Action:** The ‘bind-type’ operation for this package is not performed.

**User Response:** The package cannot be bound until the DB2 subsystem is remigrated to the newer release.

**System Programmer Response:** Warn users not to use plans containing this package until the DB2 subsystem has been remigrated to the newer release.

**DSNT247I**  
*bind-type ERROR object-type NOT FOUND FOR*  
*object-type = object-name*  

**Explanation:** You attempted to FREE or REBIND multiple plans or packages using the asterisk (*) but no plans or packages were found.

- **bind-type**: Type of bind subcommand: REBIND or FREE
- **object-type**: Type of object to be freed or rebound: PLAN or PACKAGE
- **object-name**: If object-type is PLAN, object-name is the name of the application plan. Otherwise, it is the name of the package in `location.collection.package.(version)` format.

**System Action:** The REBIND or FREE operation is not performed.

**User Response:** Check the plan or package name. If it is correct, no plans or packages were found and no operation can be performed; otherwise, correct the plan or package name and reissue the REBIND or FREE subcommand.

**DSNT249I**  
*csect-name bind-type WARNING FOR PLAN*  
*plan-name keyword LOCATION-ID location-id NOT FOUND*  
*IN SYSIBM.LOCATION*  

**Explanation:** A ‘location-id’ was specified on the PKLIST or CURRENTSERVER keyword on a bind subcommand. That location is not defined in the SYSIBM.LOCATIONS table.

- **bind-type**: Type of bind subcommand: BIND or REBIND
- **plan-name**: Name of the plan
- **keyword**: The bind subcommand containing the nonexistent location: PKLIST or CURRENTSERVER
- **location-id**: The nonexistent location

**System Action:** The bind process will continue.

**System Programmer Response:** Define the appropriate ‘location-ids’ in the SYSIBM.LOCATION catalog table prior to executing the plan.

**DSNT250I**  
*BIND UNABLE TO OPEN DBRM LIBRARY*  
*USING authorization-id AUTHORITY object-type = object-name*  

**Explanation:** The BIND subcommand was unable to open the DBRM partitioned data set(s).

- **authorization-id**: Authorization ID of the invoker of the BIND subcommand.
- **object-type**: PLAN | PACKAGE
- **object-name**: If ‘object-type’ is PLAN, ‘object-name’ is the name of the application plan. Otherwise, it is the name of the package in `location.collection.package.(version)` format.

**User Response:** Contact the system programmer, providing all material associated with the error.

**System Programmer Response:** Determine why the BIND subcommand was unable to open the DBRM library, and correct the problem.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2, 5, 32.

**DSNT251I**  
*BIND UNABLE TO LOCATE DBRM LIBRARY*  
*MEMBERS USING authorization-id AUTHORITY object-type = object-name*  

**Explanation:** The BIND subcommand received an I/O error while attempting to locate the specified DBRM library member(s).

- **authorization-id**: Authorization ID of the invoker of the BIND subcommand.
- **object-type**: PLAN | PACKAGE
- **object-name**: If object-type is PLAN, object-name is the name of the application plan. Otherwise, it is the name of the package in `location.collection.package.(version)` format.

**System Programmer Response:** Correct the reason for the I/O error, and reissue the BIND subcommand.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2, 5, 32.

**DSNT252I**  
*csect-name bind-type OPTIONS FOR PLAN*  
*plan-name*  

**Explanation:** This message shows the BIND or REBIND options that were used for the plan specified by plan-name during bind or rebind processing.

- **ACTION**: bind-option1  
  bind-option2
- **OWNER**: bind-option3  
  bind-option4
- **VALIDATE**: bind-option5
- **ISOLATION**: bind-option6
- **ACQUIRE**: bind-option7
- **RELEASE**: bind-option8
- **EXPLAIN**: bind-option9
- **DYNAMICRULES**: bind-option10

**Severity:** 0 (informational)
**Explanation:** This message shows the BIND or REBIND options that were used for the plan specified by `plan-name` during bind or rebind processing.

**Severity:** 0 (informational)

**Explanation:** This message shows the BIND or REBIND options that were used for the local package specified by `package-name` during bind or rebind processing.

**Severity:** 0 (informational)

**Explanation:** This message shows the BIND or REBIND options that were used for the local package specified by `package-name` during bind or rebind processing.

**Severity:** 0 (informational)

**Explanation:** The named DBRM member is empty, a package cannot be created.

**System Action:** No package is created.

**Explanation:** The location and collection-id of the package being created are the same as the local location and the collection-id specified with the COPY keyword. You cannot create a package that is the same name as the package being copied.

**System Action:** The package is not bound.

**System Programmer Response:** Choose a different collection id for the package you are creating and resubmit the subcommand.

**Explanation:** If binding a PLAN with a nonlocal location specified in the CURRENTSERVER, a package list is required using the PKLIST keyword to access any packages at the location specified.

**System Action:** The bind process will continue.

**System Programmer Response:** Add a package list with package(s) that reference the location specified in the CURRENTSERVER or delete the CURRENTSERVER from the BIND or REBIND subcommand.

**Explanation:** There are no packages in the package list that reference the location specified in the CURRENTSERVER keyword.

**System Action:** The bind process will continue.

**System Programmer Response:** Change ‘location-ids’ for the packages in the package list to reference the location in the CURRENTSERVER or change the location specified in CURRENTSERVER.
**DSNT260I**  
**csect-name bind-type - THE SUBMITTED PARAMETERS RESULT IN AN INVALID COMBINATION OF bind-option1 AND bind-option2**  
**FOR object-type = object-name**

**Explanation:** The BIND or REBIND subcommand has been submitted with an invalid combination of bind option or parameter values.

- **bind-type**  
  Type of bind subcommand: BIND or REBIND.

- **object-type**  
  PLAN or PACKAGE

- **object_name**  
  If object-type is PLAN, object-name is the name of the application plan. If object-type is PACKAGE, object_name is the name of the package in the format 'location-id.collection-id.package-id'.

**bind-option1** and **bind-option2**

The invalid combination of bind option values, where bind-option1 and bind-option2 are each an option name and value.

- If object-type is PLAN, then one of the following applies:
  - bind-option1 was used on the REBIND subcommand and bind-option2 exists in the SYSIBM.SYSPLAN catalog table for PLAN object-name, or
  - bind-option2 was used on the REBIND subcommand and bind-option1 exists in the SYSIBM.SYSPACKAGE catalog table for PLAN object-name.

- If object-type is PACKAGE, then one of the following applies:
  - bind-option1 was used on the BIND COPY or REBIND subcommand and bind-option2 exists in the SYSIBM.SYSPACKAGE catalog table for PACKAGE object-name, or
  - bind-option2 was used on the BIND COPY or REBIND subcommand and bind-option1 exists in the SYSIBM.SYSPACKAGE catalog table for PACKAGE object-name.

The combination of bind-option1 and bind-option2 is not supported by DB2.

**System Action:** The BIND or REBIND process is terminated for the indicated plan or package.

**User Response:** Refer to DB2 Command Reference for valid combinations of the indicated bind option values, and reissue the BIND or REBIND subcommand with a valid combination.

**Problem Determination:** See the Explanation section of this message.

---

**DSNT263I**  
**csect-name bind-type FOR object-type = object-name FAILED BECAUSE THE bind-type DEPENDS ON FUNCTIONS IN A LATER DB2 RELEASE WITH MARK release-dependency-mark OR HIGHER**

**Explanation:** The current DB2 does not support a bind option or feature specified in the indicated bind subcommand. The bind option or feature depends on functions in a later DB2 release.

- **bind-type**  
  Type of bind subcommand: BIND or REBIND

- **object-type**  
  PLAN or PACKAGE

- **object-name**  
  If object-type is PLAN, object-name is the name of the application plan. Otherwise, it is the name of the package in 'location-id.collection-id.package-id' format.

  - When the DSN command uses a group attachment name of a DB2 subsystem that does not support a bind option or feature specified in the indicated bind subcommand, the bind option or feature is not supported.
  - When the DSN command uses a group attachment name of a DB2 data sharing group and the receiving DB2 data sharing member does not support a bind option or feature specified in the indicated bind subcommand, the bind option or feature is not supported.

**System Action:** The bind process will continue.

**System Programmer Response:** Delete one or more connection types from DISABLE clause or add a list of connection names associated with one of the connection types (DLIBATCH, CICS, IMSBMP, IMSMPP, or REMOTE. REMOTE is only valid for BIND/REBIND PACKAGE)

---

**DSNT262I**  
**csect-name bind-type WARNING - ISOLATION old-iso NOT SUPPORTED. CHANGING TO ISOLATION new-iso**

**Explanation:** DB2 does not support the isolation level specified on the local BIND or REBIND PACKAGE subcommand. The isolation level specified by new-iso is used instead.

**Severity:** 4

**System Action:** Processing continues

**User Response:** If the new isolation level is not satisfactory, change the ISOLATION option on the BIND or REBIND PACKAGE subcommand and rebind the package. Use a value that DB2 supports.

---

**DSNT261I**  
**bind-type WARNING FOR object-type = object-name ALL CONNECTION TYPES ARE DISABLED**

**Explanation:** All possible connection types are disabled. The plan or package cannot be executed.

- **bind-type**  
  Type of bind subcommand: BIND or REBIND

- **object-type**  
  PLAN or PACKAGE

**System Action:** The bind-type operation is not performed.

**User Response:** In the DSN command, specify the name of a DB2 subsystem having release dependency mark release-dependency-mark or higher that supports all of the bind options or features used in the bind-type subcommand.
For a list of the DB2 release dependency marks and their meanings, refer to the IBMREQD column in the SYSIBM.SYSPLAN or SYSIBM.SYSPACKAGE DB2 catalog tables described in Appendix D of DB2 SQL Reference.

System Programmer Response: See the 'User Response' section of this message.

**DSNT264I csect-name bind-type bind-subtype ERROR USING auth-id AUTHORITY PACKAGE**

**package-name IS A TRIGGER PACKAGE**

Explanation: To rebind a trigger package, you must use the DSN subcommand REBIND TRIGGER PACKAGE. To free a trigger package, you must use the SQL statement DROP TRIGGER. You cannot copy a trigger package.

- **bind-type** Type of bind subcommand: BIND, REBIND, or FREE
- **bind-subtype** Subtype of bind subcommand: COPY or blank
- **auth-id** Authorization ID attempting the prohibited action
- **package-name** Name of the package in the following format: 'collection.package'

System Action: The trigger package is not copied, rebound, or freed.

System Programmer Response: Check the SYSIBM.SYSPACKAGE catalog table for names of existing trigger packages. Re-invoke the bind subcommand with a 'collection.package' that is not a trigger package.

**DSNT265I csect-name bind-type bind-subtype ERROR USING auth-id AUTHORITY PACKAGE**

**package-name IS NOT A TRIGGER PACKAGE**

Explanation: The subcommand REBIND TRIGGER PACKAGE can be used only for trigger packages.

- **bind-type** Type of bind subcommand: REBIND
- **bind-subtype** Subtype of bind subcommand: TRIGGER Package
- **auth-id** Authorization ID attempting the REBIND
- **package-name** Name of the package in the following format: 'collection.package'

System Action: The package specified is not rebound.

System Programmer Response: For a package that is not a trigger package, rebind using the subcommand REBIND PACKAGE. Re-invoke the bind subcommand with a 'collection.package' that is a trigger package.

**DSNT266I csect-name bind-type FOR object-type = object-name FAILED. THE TOTAL LENGTH OF THE PATH SCHEMA NAME LIST EXCEEDS 254 CHARACTERS WITH SCHEMA NAME schema-name**

Explanation: DB2 uses the schema name list you specified in the bind option PATH to set the DB2 SQL Path that will be used for the bind process. The SQL Path is a VARCHAR(254) string containing the list of schema names you specified, where each schema name is delimited with double quotes and separated from the next schema name by a comma. The total length of this SQL Path string, including the delimiters and commas, cannot exceed 254 characters. The indicated schema name schema-name in the bind option PATH causes the SQL Path string to exceed 254 characters.

- **bind-type** Type of bind subcommand: BIND or REBIND
- **object-type** PLAN or PACKAGE
- **object-name** If object-type is PLAN, object-name is the name of the plan.
  - If object-type is PACKAGE, object-name is the name of the package in the format 'location-id.collection-id.package-id.(version-id)'
- **schema-name** The schema name specified in the bind option PATH causing the SQL Path to exceed 254 characters.

System Action: The bind-type operation is not performed.

User Response: In the bind option PATH, specify a schema name list that does not cause the SQL Path to exceed 254 characters.

For more information about the bind option PATH and the schema name list, please see: Command Reference.

System Programmer Response: See the 'User Response' section of this message.

**DSNT267I csect-name A TRIGGER PACKAGE CANNOT BE FREED USING THE FREE PACKAGE COMMAND**

Explanation: A FREE PACKAGE command was received that identified the trigger package to be freed. Trigger packages can only be deleted using the DROP TRIGGER SQL statement.

System Action: The TSO Attachment Facility is ready for more input.

User Response: Use the SQL statement DROP TRIGGER to delete the trigger package.

**DSNT268I csect-name A BIND COMMAND USING THE COPY OPTION NAMED A TRIGGER PACKAGE AS THE SOURCE FOR THE BIND**

Explanation: A trigger package cannot be used as the source for a BIND COPY command.

System Action: The TSO Attachment Facility is ready for more input.

User Response: Correct the BIND command and resubmit.

**DSNT270I THE FOLLOWING SQLCA INFORMATION WAS RETURNED FROM subsystem**

`SOLCODE = sqlcode`

`SQLSTATE = sqlstate`

`SOLERRMT = tokens`

`SQLWARN warn_fields`

Explanation: A warning or error has been received from a database server using Advanced SQL protocols (ASP) of the Distributed Relational Database Architecture (DRDA), during remote program BIND processing. The tokens of the message are:

1. subsystem - the database server,
2. sqlcode - SQL return code,
3. sqlstate - additional set of return codes common to the four relational products,
4. tokens - specific tokens passed in the message portion of the SQLCA for problem determination, and
5. warn_fields - the warning information indicators.

This message is issued by the following CSECT: DSNLXMSG

System Action: See the System Action associated with the indicated SQL return code.

System Programmer Response: See the Programmer Response associated with the indicated SQLCODE and/or SQLSTATE. Take note of the warning or error (as indicated in the SQLCODE, SQLSTATE, or one or more of the SQLWARN fields), and determine if a program change is necessary.

SQLWARNx fields are described in Appendix C of DB2 SQL Reference. A change to the application may be necessary or the system programmer may have to be consulted depending on the situation.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2, 5.

<table>
<thead>
<tr>
<th>DSNT271I THE FOLLOWING SQLCA INFORMATION WAS RETURNED FROM subsystem</th>
</tr>
</thead>
</table>

- SQLCODE = sqlcode
- SQLSTATE = sqlstate
- SQLERRMT = tokens
- SQLWARN warn_fields
- STATEMENT = stmt_num

Explanation: A warning or error has been received from a database server using advanced SQL protocols (ASP) of the Distributed Relational Database Architecture (DRDA), during remote program BIND processing. The tokens of the message are:

1. subsystem - database server,
2. sqlcode - SQL return code,
3. sqlstate - additional set of return codes common to the four relational products,
4. tokens - specific tokens passed in the message portion of the SQLCA for problem determination,
5. warn_fields - the warning information indicators, and
6. stmt_num - the statement number of the failing statement.

This message is issued by the following CSECT: DSNLXMSG

System Action: See the System Action associated with the indicated SQLCODE.

System Programmer Response: Take note of the warning or error (as indicated in the SQLCODE, SQLSTATE, or one or more of the SQLWARN fields), and determine if a program change is necessary. SQLWARNx fields are described in Appendix C of DB2 SQL Reference. A change to the application may be necessary or the system programmer may have to be consulted depending on the situation.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2, 5.

<table>
<thead>
<tr>
<th>DSNT300I AUTH-ID authorization-id NOT AUTHORIZED TO PERFORM function ON DATABASE dbname. REQUEST REJECTED</th>
</tr>
</thead>
</table>

Explanation: The invoker’s ‘authorization-id’ as designated by AUTHORIZATION ID is not authorized to perform the specified database control command function on this database. The ‘function’ is either -START, -STOP, or -DISPLAY. The name of the database is ‘dbname’.

System Action: The request is rejected. This message may be repeated.

System Programmer Response: Reissue the command with a valid name.

<table>
<thead>
<tr>
<th>DSNT301I INVALID DATABASE dbname</th>
</tr>
</thead>
</table>

Explanation: The databases named in the -START, -STOP, or -DISPLAY DATABASE command do not exist. The name of the database is ‘dbname’.

System Action: The request is rejected. This message may be repeated.

System Programmer Response: Reissue the command with a valid table space name or index name.

<table>
<thead>
<tr>
<th>DSNT302I INVALID NAME spname</th>
</tr>
</thead>
</table>

Explanation: In the message, ‘spname’ is the name of the table space or index space. The ‘spname’ specified in the SPACENAM keyword on the -START, -STOP, or -DISPLAY DATABASE command does not exist.

System Action: The request is rejected. This message may be repeated.

System Programmer Response: Reissue the command with a valid table space name or index name.

<table>
<thead>
<tr>
<th>DSNT304I csect-name INSTALLATION SYSOPR IS NOT AUTHORIZED TO CHANGE OBJECT STATUS ON DATABASE dbname. REQUEST IS REJECTED.</th>
</tr>
</thead>
</table>

Explanation: INSTALLATION SYSOPR is not authorized to perform the START DATABASE command function on this database because the command can change an objects status in this database. INSTALL SYSOPR can use the START DATABASE command only to recover LPL pages or GRECP objects. The name of the database is ‘dbname’.

System Action: The request is rejected.

Operator Response: Reissue the -START DATABASE command using the correct access mode or contact your system programmer.

<table>
<thead>
<tr>
<th>DSNT305I SUBSYSTEM FAILURE DURING command-name DATABASE COMMAND PROCESSING. RC = yy, REASON = zz</th>
</tr>
</thead>
</table>

Explanation: An error was found while processing the -START, -STOP or -DISPLAY DATABASE command. In the message, ‘command-name’ is the string ‘DISPLAY’, ‘STOP’, or ‘START’ (depending upon the command processed).

System Action: Originating from CSECT DSNTDCST:

- For relational data system (RDS) subcomponent errors:
  - ‘yy’ is a 4-byte return code of 8.
- 'zz' is a 4-byte abend code of '00E30086'.
- For data manager (DM) subcomponent errors:
- 'yy' is a 4-byte return code consisting of a 2-byte return code and a 2-byte reason code returned by the data manager function invoked by DSNTDCST.
- 'zz' is a 4-byte abend code '00E30086'.

A record is written to SYS1.LOGREC, and an SVC dump is requested before the execution unit is abended.

Originating from CSECT DSNTDDIS:
- 'yy' is a 4-byte return code of 12.
- 'zz' is a 4-byte abend code of '00E30089'.

The request is abended.

Originating from CSECTs DSNTDMUL or DSNTDMSG:
- 'yy' is a 4-byte return code returned by the message generator.
- 'zz' is a 4-byte abend code of '00E30084'.

The request is abended.

System Programmer Response: Refer to "Section 4. DB2 Codes" on page 577 for the particular abend reason code issued.

Problem Determination: Collect the following diagnostic items listed in Appendix B, "Problem determination" or page 1051.

### DSNT306I  RESPONSE MESSAGE LIMIT HAS BEEN REACHED

**Explanation:** A fixed amount of space exists in which to generate DISPLAY, START, or STOP database command messages. This message indicates that the DISPLAY, START, or STOP database command that was specified generated more messages than will fit in that space.

**User Response:** Specify individual databases and/or table spaces rather than specifying **""** (that is, all names).

### DSNT307I  INVALID RANGE SPECIFICATION  string1 IS GREATER THAN string2

**Explanation:** A range was specified on a DISPLAY DB(string1:string2) or DISPLAY DB(list) SPACENAM(list) PART(n), or START DB(name) SPACENAM(list) PART(n), or STOP DB(name) SPACENAM(list), or STOP DB(list) SPACENAM(list) PART(n) command or on a database command (START DB, STOP DB, or DISPLAY DB) on PART(string1:string2) keyword where the first string, specified alphanumerically, collates after the second string.

**User Response:** Specify the command again. Make sure the first string does not alphanumerically collate after the second string specified.

### DSNT308I  AFTER KEYWORD ONLY VALID FOR A SINGLE DATABASE OR A SINGLE TABLESPACE/INDEXSPACE WITHIN A DATABASE. REQUEST REJECTED

**Explanation:** The AFTER keyword may be specified by one of the following:
- A single database name after the keyword DATABASE
- A single table space name or index space name after the keyword SPACENAM.

**User Response:** Specify the command correctly.

### DSNT309I  csect-name object_name IS CURRENTLY state.

**Explanation:** One of the following is already in the requested state:
- A database listed in START DB(list) or STOP DB(list)
- A table space listed in START DB(name) SPACENAM(list) or STOP DB(name) SPACENAM(list)
- An index space listed in START DB(name) SPACENAM(list) or STOP DB(name) SPACENAM(list)
- A partition of a partitioned table space listed in START DB(list) SPACENAM(list) PART(n), STOP DB(list) SPACENAM(list) PART(n), START DB(list) SPACENAM(list), or STOP DB(list) SPACENAM(list)

In the message:
- The 'object' is the database, table space, index space or partition number with table space name or the index space name.
  - TABLESPACE, if the specified table space was currently in the requested state
  - INDEXSPACE, if the specified index space was currently in the requested state
  - DATABASE, if the database was currently in the requested state
  - PARTITION, if the specified partition of a partitioned table space or partitioned index was currently in the requested state
- The 'state' is:
  - START RW, if the specified object is currently started read/write
  - START RO, if the specified object is currently started read only
  - START UT, if the specified object is currently started for utility processing
  - STOPPED, if the specified object is currently stopped or is stopping
  - STOP PENDING, if the specified object currently is in stop pending status.

If there are pages in the logical page list (LPL) for the object, or if the object is in group buffer pool recovery pending (GRECP) status, a START DATABASE ACCESS(RO) or START DATABASE ACCESS(RW) command triggers a recovery of that object even if this message is issued for that object. For each object that has LPL or GRECP recovery that is initiated, DB2 issues a DSNI006 message followed by either a DSNI021 message (when the recovery completes successfully) or a DSNI005 message (when the recovery is unsuccessful).

**User Response:** No response is necessary. This message is informational only.

### DSNT310I  csect-name ALL object CURRENTLY state.

**Explanation:** A database and all of its table spaces and index spaces are already in the requested state. This occurred following the processing of one of these commands:
- START DB(*)
- STOP DB(name)
- START DB(name) SPACENAM(*)
- STOP DB(name) SPACENAM(*).
In this message:

- The 'object' is either:
  - TABLESPACE(S) if the specified table space was currently in the requested state
  - INDEXSPACE(S) if the specified index space was currently in the requested state
  - DATABASE(S) if the database was currently in the requested state.
- The 'state' is either:
  - START RW if the specified table space is currently started read/write
  - START RO if the specified table space is currently started read only
  - START UT if the specified table space is currently started for utility processing
  - STOPPED if the specified table space is currently stopped, has a stop pending against it, or is stopping.

If there are pages in the logical page list (LPL) for the object, or if the object is in group buffer pool recovery pending (GRECP) status, a START DATABASE ACCESS(RO) or START DATABASE ACCESS(RW) command triggers a recovery of that object even if this message is issued for that object. For each object that has LPL or GRECP recovery that is initiated, DB2 issues a DSNII006 message followed by either a DSNII021 message (when the recovery completes successfully) or a DSNII005 message (when the recovery is unsuccessful).

User Response: No response is necessary. This message is informational only.

**DSNT311I** MESSAGE LIMIT EXCEEDED. DISPLAY IS TERMINATED.

Explanation: The number of messages generated exceeds the maximum number of messages specified in the LIMIT keyword or exceeds the system default.

**DSNT312I** object-name MUST BE STARTED RW. NO ACTION TAKEN.

Explanation: The ACCESS keyword is either RO or UT, and the object must be started ACCESS (RW).

In the message, 'object' is either:

- TABLESPACE(S) in if the START DB(name) SPACENAM(...) is specified, or
- DATABASE if the START DB(name) is specified.

**DSNT313I** ACCESS(FORCE) IS VALID ONLY WITH EXPLICIT TABLESPACE OR INDEXSPACE NAMES. COMMAND IS REJECTED

Explanation: The ACCESS(FORCE) keyword can be specified when either:

- A single table space or index space name appears after the keyword SPACENAM in a START DATABASE command.
- A list of table space and/or index space names appears after the keyword SPACENAM in a START DATABASE command.

Operator Response: Specify the command correctly.

**DSNT314I** csect_name INVALID PARTITION SPECIFICATION FOR OBJECT object-name

Explanation: The PART keyword is invalidly specified in a START DATABASE, STOP DATABASE, or DISPLAY DATABASE command.

The PART keyword is invalid if it is specified for:

- A nonpartitioned table space
- A nonpartitioned type 1 index
- A type 2 index not defined on a partitioned table space

The object object-name can be either a table space or an index space.

No action for this table space or index space is performed by the START DATABASE, STOP DATABASE or DISPLAY DATABASE command. Any other valid table space or index space specified is processed by the command.

Severity: 8 (error)

System Action: The desired command is not processed for the table space or index space in question. All other valid table spaces or index spaces specified in the command are processed.

User Response: Resubmit the command for the nonpartitioned table space or index space without using the PART keyword.

Problem Determination: SYSIBM.SYSTABLESPACE in the DB2 catalog indicates whether a table space is partitioned. SYSIBM.SYSINDEXSPACE in the DB2 catalog indicates whether an index space is partitioned and whether the index space is a type 1 or a type 2 index. Type 2 nonpartitioned indexes can be started, stopped, or displayed at the logical partition level; type 1 cannot.

**DSNT315I** csect_name INVALID PARTITION NUMBER OR RANGE SPECIFIED - part-num IS FOR OBJECT object-name

Explanation: An invalid partition number or range was specified in the PART keyword for a START DATABASE, STOP DATABASE or DISPLAY DATABASE command.

Partition number or range part-num is invalid for the object object-name.

Severity: 8 (error)

System Action: The part number or range is ignored. All other valid partitions specified are processed if PART was specified as list.

User Response: Determine the correct partition specification for the table space or index that was the subject of the specified command and resubmit the command.

Problem Determination: SYSIBM.SYSTABLESPACE in the DB2 catalog indicates the correct range of partition numbers for the table space. SYSIBM.SYSINDEXSPACE in the DB2 catalog indicates whether an index space is partitioned and whether the index space is a type 1 or a type 2 index. Type 2 indexes can be started, stopped, or displayed at the logical partition level; type 1 cannot.
**DSNT316I** csect-name A LOGICAL PARTITION OF AN INDEX WHICH HAS PAGES IN THE LPL OR HAS BEEN MARKED GRECP CANNOT BE STARTED FOR RW OR RO ACCESS

**Explanation:** The START DATABASE command was specified for a logical partition of a nonpartitioned index which has pages in the logical page list (LPL) or is marked group buffer pool recovery pending (GRECP). To start a nonpartitioned index with one of these exception conditions, the START DB command must be specified without the PART keyword.

**Severity:** 8 (error)

**System Action:** The command is not processed for the index space. All other valid table spaces or index spaces specified in the command are processed.

**User Response:** Submit the command for the nonpartitioned index space without using the PART keyword.

**Problem Determination:** If more information on the status of the index space is required, use the -DISPLAY DATABASE command.

**DSNT317I** csect-name ANY USER-DEFINED INDEXES ON DSND06 COULD NOT BE cmd-type DUE TO A RESOURCE UNAVAILABLE ON THE CATALOG OR DIRECTORY.

**Explanation:** If user-defined indexes exist on DSND06, they could not be displayed, started or stopped (depending on cmd-type) because the catalog or directory was not available. DB2-defined indexes and table spaces are not affected by this unavailability.

**Programmer Response:** When you get this message, correct the resource unavailable problem and reissue the command.

**System Action:** Any user-defined indexes on DSND06 were not affected by the command issued. All other table spaces and index spaces were processed by the command.

**DSNT311I** csect-name DATABASE name AND ANY SPACE IT CONTAINS CANNOT BE STOPPED. IT IS THE ACTIVE COMMUNICATIONS DATABASE.

**Explanation:** The database specified in the message cannot be stopped because it is the active communications database. In addition, spaces within the active communications database cannot be stopped.

**System Action:** Nothing is stopped.

**Operator Response:** If the database or any space within it must be stopped, you must stop the distributed data facility (STOP DDF). In a DB2 data sharing environment, you must stop the distributed data facility on all members of the DB2 data sharing group.

**DSNT332I** TABLESPACES AND INDEXSPACES ARE UNAVAILABLE BECAUSE DATABASE name IS STOPPED

**Explanation:** The database `name` is currently marked as stopped. Consequently, its table spaces and index spaces are unavailable even though they may have been started.

**DSNT350I** -luw-id ACCESSING DATA FOR location

**Explanation:** This message follows message DSNT394I or DSNT396I for each thread reported that is participating in distributed data access (database access thread). This additional line reports the distributed identification as follows:

- `luw-id=token` The logical-unit-of-work identifier (LUW-ID) is a unique identifier that is assigned to the thread followed by an ` ` sign and a token. The token can be used in place of luw-id in any DB2 command that accepts luw-id as input.

**DSNT358I** csect_name INVALID PARTITION SPECIFICATION FOR OBJECT object-name

**Explanation:** Specification of the PART keyword in a DISPLAY DATABASE command is invalid.

The PART keyword is invalid if it is specified for:
- A nonpartitioned table space
- A nonpartitioned type 1 index
- A type 2 index not defined on a partitioned table space

The object `object-name` can be either a table space or an index space.

No action for this table space or index space is performed by the DISPLAY DATABASE command. Any other valid table space or index space specified is processed by the command.

**Severity:** 8 (error)

**System Action:** The desired command is not processed for the table space or index space in question. All other valid table spaces or index spaces specified in the command are processed.

**User Response:** Resubmit the command for the nonpartitioned table space or index space without using the PART keyword.

**Problem Determination:** SYSIBM.SYSTABLESPACE indicates whether a table space is partitioned. SYSIBM.SYSINDEXSPACE indicates whether an index space is partitioned and whether the index space is a type 1 or a type 2 index. Type 2 nonpartitioned index spaces can be displayed at the logical partition level; type 1 indexes cannot.

**DSNT359I** csect_name INVALID PARTITION NUMBER SPECIFIED - part-num FOR OBJECT object-name

**Explanation:** An invalid partition number was specified in the PART keyword for a DISPLAY DATABASE command.

Partition number `part-num` is invalid for the object `object-name`.

**Severity:** 8 (error)

**System Action:** The part number is ignored. All other valid partitions specified are processed.

**User Response:** Determine the correct partition specification for the table space or index that was the subject of the specified command and resubmit the command.
Problem Determination: SYSBM.SYSTABLESPACE in the DB2 catalog indicates the correct range of partition numbers for the table space. SYSBM.SYSINDEXSPACE in the DB2 catalog indicates whether an index space is partitioned and whether the index space is a type 1 or a type 2 index. The PART keyword can be used to display the status of logical partitions of type 2 indexes but not type 1 indexes.

DSNT360I ****************************
Explanation: This message consists of 35 asterisks that begin the display of any database and the display of space names for any database.

DSNT361I "DISPLAY DATABASE SUMMARY" report-type-list
Explanation: This message is a multiple-line message that labels the requested set of databases, table spaces, and index spaces.
In the message, 'report-type-list' lists all options specified on the command delimited by spaces. Possible values are:
ACTIVE All allocated databases are listed.
GLOBAL All requested database information is listed. This title is produced if ACTIVE, DISABLED, and RESTRICT are omitted.
LOCKS The connection identifiers and correlation identifiers of all applications holding, retaining, or waiting for locks on the specified table spaces or index spaces are displayed.
RESTRICT All databases with restricted usage (that is, RO, started UT) are listed.
USE The connection identifiers and correlation identifiers of all allocated applications are listed.
CLAIMERS The connection identifiers and correlation identifiers of all applications holding claims on the specified database are displayed.
LPL The page number ranges of the pages that are included in the logical page list for the table space or index space.

DSNT362I DATABASE = data-base-name STATUS = status DBD LENGTH = dbd-length
Explanation: This message signals the beginning of display information from the DISPLAY DATABASE command. It lists the name, status, and DBD length of the database. All table space and index space names listed in the following DSNT392I, DSNT394I, or DSNT396I messages are contained within this database.

data-base-name The database name.
status A combination of one or more of the following strings delimited by a comma. The maximum length of the string is 18 characters.
RO The database is started for read activity only.
RW The database is started for read and write activity.
STOP The database is stopped.

DSNT363I PHYSICAL ERROR PAGE RANGE FOR DATA SET data-set-name LOW=lowphy, HIGH=hiphy
Explanation: This message is the response to a -DISPLAY DATABASE command when the SPACENAM keyword is specified in order to notify the user of any physical I/O errors encountered on a data set.
In the message, 'data-set-name' is the name of the data set with errors. The variables 'lowphy' and 'hiphy' identify the range of physical pages, within the data set, that were being read when the I/O errors occurred. Physical page numbers are assigned in relationship to the beginning of the data set in which the pages reside.
This message is always preceded by messages DSNT360I and DSNT361I, which identify the name of the database and page set that the specified data set supports.
Page sets (table spaces or index spaces) are made up of supporting data sets. Physical pages are pages in supporting data sets that are numbered from the beginning of the particular data set in which they reside. This message refers to physical pages in a data set that support (are part of) some page set.
System Action: See the Explanation section for this message.

DSNT364E csect-name KEYWORD ONLY IS USED INCORRECTLY
Explanation: Keyword ONLY is used incorrectly in the DISPLAY DATABASE command. When the SPACENAM keyword is specified, keyword ONLY is valid only if one of the following keywords is also used:
LOCKS
LPL
CLAIMERS
USE
System Action: The DISPLAY DATABASE command is not processed.
User Response: Add one of the keywords mentioned above in the explanation to the DISPLAY DATABASE command and issue the command again.

DSNT365I NO DATABASES FOUND
Explanation: This message is produced when a DISPLAY DB(name) is entered and no databases were found to satisfy the request.
System Action: The process continues normally.

DSNT366I DATABASE name NOT type
Explanation: A database listed in the DISPLAY DB(...) is not of the correct type. The variables are as follows:
name The name of the object.
type The type of request specified: ACTIVE, RESTRICTED, ACTIVE OR RESTRICTED
Note that either DSNT301I or DSNT302I is produced if no object is found and the keywords ACTIVE and RESTRICT are omitted.

**System Action:** Processing continues normally.

### DSNT368W
csect-name MORE THAN ONE MUTUALLY EXCLUSIVE KEYWORD WAS SPECIFIED IN THE DISPLAY DATABASE COMMAND.

**Explanation:** The keywords, LOCKS, LPL, CLAIMERS, WEPR, and USE are mutually exclusive. Only one should be specified in a DISPLAY DATABASE command. The precedence order for which keyword takes precedence over the others is:

1. LPL
2. CLAIMERS
3. LOCKS
4. USE
5. WEPR

**System Action:** The DISPLAY DATABASE command is processed with this warning message.

### DSNT367I
NO INFORMATION AVAILABLE

**Explanation:** This message indicates there is no LOCK, USE, LPL, WEPR, or CLAIMER information available when a DISPLAY DATABASE command is entered with the keywords LOCKS, USE, LPL, WEPR, or CLAIMERS.

**System Action:** The process continues normally.

### DSNT375I
PLAN=plan-id1 WITH CORRELATION-ID=id1 CONNECTION-ID=id2 LUW-ID=id3 THREAD-INFO=id4 IS DEADLOCKED WITH PLAN=plan-id2 WITH CORRELATION-ID=id5 CONNECTION-ID=id6 LUW-ID=id7 THREAD-INFO=id8 ON MEMBER id9

**Explanation:** This message is issued whenever plan-id1 with correlation id1, connection id2, and LUW id3 is denied an IRLM lock because of a detected deadlock. Plan plan-id2 identifies one of the members of the deadlock.

DB2 does not attempt to identify all survivors of a deadlock or all participants in a deadlock in the DSNT375I message. Plan plan-id2 in message DSNT375I might be just one of several plans holding locks on the desired resource.

If multiple deadlocks are detected during the same deadlock-detection interval, the lock holder identified by plan-id2 in one DSNT375I message might be selected to break a deadlock identified by a different DSNT375I message. The lock holder identified by plan-id2 is not guaranteed to be a winner in all deadlocks in which it participates.

A DB2 IFCID 172 trace record contains the information needed to determine all participants in, and survivors of, a given deadlock.

plan-id1, plan-id2

The names of the executing plans.

id1 The correlation identifier of the thread associated with plan-id1. Correlation IDs beginning with '0nn', where 'nn' is a number from 01 to 28, identify a system agent.

id2 The connection identifier of the thread associated with plan-id1.

id3 The logical-unit-of-work identifier of the thread associated with plan-id1. An asterisk (*) indicates that the thread does not have an LUW-ID. If the LUW-ID is not an asterisk, the value is a logical-unit-of-work identifier that is assigned to the thread. It is followed by an equal (=) sign and a token value, which can be used in place of the logical-unit-of-work identifier in any DB2 command that accepts a logical-unit-of-work identifier as input.

This ID contains additional identifiers that define more specific information regarding the identity of the agent.

In many distributed configurations, the primary authorization-ID used with DB2 is not necessarily the user-ID of the end-user. If provided by the client, the additional tokens further assist in identifying the client end-user.

The following identifiers, separated by a colon (:), are provided:

- The primary authorization-ID associated with the thread.
- Workstation name of the end-user's workstation. An asterisk (*) indicates that is not relevant to the thread or was not provided by the client.
- End-user's user-ID. An asterisk (*) indicates that is not relevant to the thread or was not provided by the client.
- Application name of the end-user's application. An asterisk (*) indicates that is not relevant to the thread or was not provided by the client.

The correlation identifier of the thread associated with plan-id2.

The connection identifier of the thread associated with plan-id2.

The logical-unit-of-work identifier of the thread associated with plan-id2. An asterisk (*) indicates that the thread does not have an LUW-ID. If the LUW-ID is not an asterisk, the value is a logical-unit-of-work identifier that is assigned to the thread. It is followed by an equal (=) sign and a token value, which can be used in place of the logical-unit-of-work identifier in any DB2 command that accepts a logical-unit-of-work identifier as input.

This ID contains additional identifiers that define more specific information regarding the identity of the agent.

In many distributed configurations, the primary authorization-ID used with DB2 is not necessarily the user-ID of the end-user. If provided by the client, the additional tokens further assist in identifying the client end-user.

The following identifiers, separated by a colon (:), are provided:

- The primary authorization-ID associated with the thread.
- Workstation name of the end-user's workstation. An asterisk (*) indicates that is not relevant to the thread or was not provided by the client.
# End-user's user-ID. An asterisk (*) indicates it is not relevant to the thread or was not provided by the client.

* Applications name of the end-user's application.

* An asterisk (*) indicates that it is not relevant to the thread or was not provided by the client.

id9 Identifies the member name of the DB2 subsystem on which the thread associated with plan-id2 is executing.

DB2 can recover from a lock denial in some cases and can complete successfully. In such a case, the SQLCA is not filled in. One example is during setup of performance enhancements during bind time for execution time.

The SQLCA corresponding to correlation id id1, connection id id2, and LUW-ID id3 contains an SQLCODE of -904, -911, -913, or -923 and the name of the resource involved in the deadlock.

If you receive a system plan in this message, see the information about system plans in message DSNT376I.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, *Problem determination* on page 1051: 1, 2, 5, 18.

### Explanation: This message is issued whenever plan plan-id1 with correlation id id1, connection id id2, and LUW-ID id3 is denied a lock by IRLM, because the amount of time to wait for a locked resource was exceeded. Plan plan-id2 identifies one of the plans holding a lock on the desired resource. The listed plan is not necessarily responsible for the time-out condition.

**plan-id2**

The names of the executing plans.

id1 The correlation identifier of the thread associated with plan-id1. If the execution of the plan was switched by DB2 to a system agent, the correlation identifier identifies the system agent. Correlation IDs beginning with 'Onn', where ‘nn’ is a number from 01 to 28, identify system agents.

id2 The connection identifier of the thread associated with plan-id1. If the execution of the plan was switched by DB2 to a system agent, the connection identifier is the DB2 subsystem name.

id3 The logical-unit-of-work identifier of the thread associated with plan-id1. An '***' indicates that the thread does not have a LUW-ID. If the LUW-ID is not an '***', the value is a logical-unit-of-work-id that is assigned to the thread followed by an '*' sign and a token value, which can be used in place of logical-unit-of-work-id in any DB2 command that accepts logical-unit-of-work-id as input.

**id4**

This ID contains additional identifiers that define more specific information regarding the identity of the agent.

In many distributed configurations, the primary authorization-ID used with DB2 is not necessarily the user-ID of the end-user. If provided by the client, the additional tokens further assist in identifying the client end-user.

The following identifiers, separated by a colon (:), are provided:

* The primary authorization-ID associated with the thread.

* Workstation name of the end-user's workstation. An asterisk (*) indicates it is not relevant to the thread or was not provided by the client.

* End-user's user-ID. An asterisk (*) indicates it is not relevant to the thread or was not provided by the client.

* Application name of the end-user's application. An asterisk (*) indicates that it is not relevant to the thread or was not provided by the client.

id5 The correlation identifier of the thread associated with plan-id2. If the execution of the plan was switched by DB2 to a system agent, the correlation identifier identifies the system agent. Correlation IDs beginning with ‘Onn’, where ‘nn’ is a number from 01 to 28, identify system agents.

id6 The connection identifier of the thread associated with plan-id2. If the execution of the plan was switched by DB2 to a system agent, the connection identifier is the DB2 subsystem name.

id7 The logical-unit-of-work identifier of the thread associated with plan-id2. An '*' indicates that the thread does not have a LUW-ID. If the LUW-ID is not an '***', the value is a logical-unit-of-work-id that is assigned to the thread followed by an '*' sign and a token value, which can be used in place of logical-unit-of-work-id in any DB2 command that accepts logical-unit-of-work-id as input.

**id8**

This ID contains additional identifiers that define more specific information regarding the identity of the agent.

In many distributed configurations, the primary authorization-ID used with DB2 is not necessarily the user-ID of the end-user. If provided by the client, the additional tokens further assist in identifying the client end-user.

The following identifiers, separated by a colon (:), are provided:

* The primary authorization-ID associated with the thread.

* Workstation name of the end-user's workstation. An asterisk (*) indicates it is not relevant to the thread or was not provided by the client.

* End-user's user-ID. An asterisk (*) indicates it is not relevant to the thread or was not provided by the client.

* Application name of the end-user's application. An asterisk (*) indicates that it is not relevant to the thread or was not provided by the client.

id9 Identifies the member name of the DB2 subsystem on which the thread associated with plan-id2 is executing.

DB2 can recover from a lock denial in some cases and can complete successfully. In such a case, the SQLCA is not filled...
in. One example is during setup of performance enhancements during bind time for execution time.

The SQLCA corresponding to correlation-id id1, connection-id id2, and LUW-id id3 contains an SQLCODE of -904 or -923 and the name of the resource involved in the timeout.

Several different system plans can appear in plan-id1 and plan-id2. These system plans are not documented in SYSIBM.SYSPLAN. If you receive a system plan in this message, you are in contention with another user. If you are not doing an automatic rebind, message DSNT501I or DSNT501I might accompany this message and identify that resource. If you need additional information, refer to the SQLCA and any additional bind messages. If you are doing an auto rebind, the SQLCA is not available. Refer to Section 6 of DB2 Application Programming and SQL Guide for more information about automatic rebinding. The system plans are:

- ACT
- BCT
- DISTSERV
- DSNBIND
- STARTCT
- DSNUTIL.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Timeouts can happen for many reasons, including factors relating to DB2 or IRLM. Some of those reasons are listed below along with possible ways to reduce or eliminate your timeout. Refer to Section 5 (Volume 2) of DB2 Administration Guide for more detail about the concepts discussed in this list. See also SQLCODEs -911 and -913.

Timeouts can result from the definition of objects or the structure of applications as explained below.

- If the resource involved in the timeout is listed in the DSNT500I/DSNT501I message as a table or table space, check the following items for other possible causes of timeout:
  1. Check the LOCKRULE column value in SYSIBM.SYSTABLESPACES for the table space being accessed. A lock size of TABLE or TABLESPACE could cause a timeout. If your application does not need to lock the entire table or table space, you can resolve the timeout by changing the lock size to PAGE or ANY using the ALTER statement.
  2. Check the number of LOCKS PER TABLE(SPACE), which was set at the time DB2 was installed. If a large number of page or row locks are acquired and held, a small value for LOCKS PER TABLE(SPACE) could be causing lock escalation to a table or table space lock. The timeout can be resolved by changing the value on the DSNTIPK update panel or by binding the application’s plan with RELEASE(COMMIT) and doing commits more frequently.
  3. You can use EXPLAIN (described in Section 6 of DB2 Application Programming and SQL Guide) with the failing SQL statement and check the TSLOCKMODE column for every table/table space in the EXPLAIN output. If the competing applications are attempting to obtain incompatible locks, you might be able to resolve the timeout by running the applications sequentially rather than concurrently or by following the suggestions in other steps listed here, such as changing lock size, ACQUIRE/RELEASE parameters or ISOLATION type.

4. Check the ACQUIRE/RELEASE values specified on the plan. ACQUIRE(ALLOCATE) acquires all locks for all tables and table spaces referenced in the plan, even if the program logic does not cause the table/table space to be accessed. Binding with RELEASE(DEALLOCATE) causes table, table space and DBD locks to be held longer than binding with RELEASE(COMMIT), possibly causing a timeout.

5. Use the DISPLAY DB LOCKS command during program execution to verify that the locks being held at the time of the timeout are as expected. If they are not, you may need to use ALTER to change the locksize of the table space if possible, or rebind your plan with different ACQUIRE, RELEASE or ISOLATION values.

6. ISOLATION level affects the mode of table/table space locks chosen and may be of concern if the plan is bound with RR and there is a page set scan.

   - Check the ISOLATION level specified on the plan in SYSIBM.SYSPLAN. A value of RR is more likely to cause a timeout because it requires more page or row locks and also has a greater potential than CS for causing lock escalation, which can cause timeouts as noted above.
   - Check the frequency of COMMITs in the application. A large number of updates without any COMMITs can cause a timeout because the more pages that are changed, the more page or row locks held, and the greater potential for lock escalation.

This condition might be caused by an undetected deadlock, for example, an agent holding a lock on the resource for a period of time that exceeds either the specified time or the IRLM default wait time.

If the time limit is too small, you can increase the limit by specifying a new IRLM locked resource wait time limit. To do this, you can either use the parameter in the DSNS6SPRM assembler macro in the DSNTIJUZ job stream or update the 'wait-time' field of the DB2 installation IMS Resource Lock Manager panel, IRLMRWT. You must also specify all other parameters contained in this version of the CSECT. Then do one of the following:

   - Resubmit installation job DSNTIJUZ with the link-edit SYSIN file 'NAME' parameter that matches the -START DB2 'PARM=' parameter.
   - Reassemble DSNS6SPRM and relink-edit DSNZPARM by resubmitting installation job DSNTIJUZ. The link-edit SYSIN file 'NAME' parameter must match the -START DB2 'PARM=' parameter.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, "Problem determination on page 1051" 1, 2, 5, 9, 18.

<table>
<thead>
<tr>
<th>DSNT377I</th>
<th>PLAN=plan-id1 WITH CORRELATION-ID=id1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CONNECTION-ID=id2 LUW-ID=id3</td>
</tr>
<tr>
<td></td>
<td>THREAD-INFO=id4 IS IN CONFLICT WITH AN</td>
</tr>
<tr>
<td></td>
<td>INDOUBT THREAD ON MEMBER id5</td>
</tr>
</tbody>
</table>

**Explanation:** This message is issued by the service controller subcomponent. A plan cannot gain an IRLM lock because a required resource is currently undergoing recovery. The message identifies the plan in this way:

plan-id1 The name of the executing plan.
The correlation identifier (ID) of the thread associated with plan plan-id1. Correlation IDs beginning with '0nnn', where 'nnn' is a number from 01 to 28, identify system agents.

The connection-ID of plan plan-id1.

The logical-unit-of-work identifier (LUW-ID) of plan-id1. An '*' indicates that the thread does not have a LUW-ID. If the LUW-ID is not an '***', the value is a logical-unit-of-work id that is assigned to the thread followed by an '=' sign and a token value, which can be used in place of logical-unit-of-work-id in any DB2 command that accepts logical-unit-of-work-id as input.

This ID contains additional identifiers that define more specific information regarding the identity of the agent.

In many distributed configurations, the primary authorization-ID used with DB2 is not necessarily the user-ID of the end-user. If provided by the client, the additional tokens further assist in identifying the client end-user.

The following identifiers, separated by a colon (:), are provided:

- The primary authorization-ID associated with the thread.
- Workstation name of the end-user's workstation. An asterisk (*) indicates it is not relevant to the thread or was not provided by the client.
- End-user's user-ID. An asterisk (*) indicates it is not relevant to the thread or was not provided by the client.
- Application name of the end-user's application. An asterisk (*) indicates that is not relevant to the thread or was not provided by the client.

Identifies the member name of the DB2 subsystem on which the indoubt thread is executing.

The SQLCA corresponding to correlation-ID id1, connection-ID id2, and LUW-ID id3 contains an SQLCODE -904, -911, -913, or -923 and the name of the resource currently being recovered by DB2.

If you receive a system plan in this message, see the information about system plans in message DSNT3761.

System Action: Processing continues.

Problem Determination: Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051.

DSNT378I csect-name PLAN=plan-id1 WITH
CORRELATION-ID=id1 CONNECTION-ID=id2
LUW-ID=id3 THREAD-INFO=id4 TIMED OUT
BECAUSE OF A RETAINED LOCK HELD BY MEMBER id5

Explanation: A plan cannot get an IRLM lock because the resource is held by a retained lock on behalf of another member in the data sharing group, and the amount of time to wait for the locked resource was exceeded. The member holding the retained lock is either failed, or is in the process of restarting to recover its retained locks. This message is only issued if the RETLWAIT installation parameter in DSN6SPRM is set to 'YES'. If RETLWAIT is set to 'NO' (this is the default), then any IRLM lock that conflicts with a retained lock will not wait, but instead will be immediately rejected (see reason codes 00C900BE and 00C20254).

The following identifiers are used in the message:

plan-id1 The name of the executing plan.

The system programmer response is to:

System Action: The SQLCA corresponding to correlation-ID id1, connection-ID id2, and LUW-ID id3 contains an SQLCODE -904, -911, -913 or -923 and the name of the resource involved in the timeout.

System Programmer Response: Restart the member holding the retained lock if it has not yet been restarted.

Problem Determination: Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051.
**DSNT379I** IRLM AUTO-START Failed

**Explanation:** During the IDENTIFY to IRLM, the AUTO-START of IRLM using SVC 34 failed. This message accompanies abend code X'00E30080'.

**System Action:** DB2 is terminated with an abend code of X'04E'.

**Operator Response:** Notify system programmer.

**System Programmer Response:** Determine the cause of failure from the SVC 34 return code preserved in register 2.

---

**DSNT382I** IRLM AUTO-STOP Failed

**Explanation:** During a sign off from IRLM caused by either DB2 normal shutdown (CSECT DSNTLOUI) or DB2 subsystem termination (CSECT DSNTLCLE), an AUTO-STOP of IRLM using SVC 34 failed. If this occurred during normal sign off, this message accompanies abend reason code X'00E30075'.

**System Action:** DB2 abends.

**Operator Response:** Notify system programmer.

**System Programmer Response:** Manually stop IRLM.

**Problem Determination:** Determine the cause of failure from the SVC return code preserved in register 2.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051.

---

**DSNT384I** IRLM AUTO-START Wait Time Exceeded

**Explanation:** An attempt was made to automatically start IRLM. However, the wait time specified was exceeded.

**System Action:** DB2 is abended.

**Operator Response:** Notify system programmer.

**System Programmer Response:** Either manually start IRLM or modify the installation-defined auto-start wait time. Restart DB2.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051.

Check the IRLMID given in the IRLM procedure against the IRLMSID in macro DSN6SPRM which was in the DSNZPARM used at startup.

---

**DSNT388I** Name Type Part Status Connid Corrid Claiminfo

**Explanation:** This message is the heading for a set of messages that display information as a result of a -DISPLAY DATABASE command when the keyword CLAIMERS is specified. The message number for this message is not displayed. This message is always followed by multiple DSNT389I messages containing the column data. Refer to message DSNT389I for a description of the data these headings identify.

---

**DSNT389I** Space Type Part Status Conn-Id Corrid Claims

**Explanation:** This message contains the display information that results from a -DISPLAY DATABASE command when the keyword CLAIMERS is specified. This message contains the column data describing the status of a table space or index space in the database listed in message DSNT362I.

**System Programmer Response:** Notify system programmer.
The index space is in page set rebuild pending status.

The object is in the Restart Pending state. Backout activity against the object must be completed by using the RECOVER POSTPONED command, or by recycling the system with system parameter LBACKOUT=AUTO.

The object (a table space or table space partition) is in recovery pending status.

The object is in the Restart Pending state.

THE index space is in set rebuild pending status.

The object (a table space, a table space partition, index space, or index space partition) is in informational copy pending status.

The object has pages or ranges of pages that are unavailable because of physical damage.

The logical partition is stopped.

The index space is in page set rebuild pending status.

The object (an index space, index partition or logical index partition) is in rebuild pending status. For logical partitions, the RBDP status can appear as RBDP*.

Indicates that the entire index is inaccessible to SQL applications, however only the logical partition needs to be recovered.

The object (a table space, table space partition, index space, index partition or logical index partition) is in recovery pending status.

The type and duration of currently held claims. The claim is composed of a claim class descriptor and a claim duration descriptor.

The claim class descriptor has one of the following values:

- CS Cursor stability claim class
- RR Repeatable-read claim class
- WR Write claim class

The claim duration descriptor describes the duration of the claims as follows:

- A The claim is held until deallocation.
- C The claim is held until the next commit point.
- H The claim is held across commit.

For a nonpartitioned index, if the index is not already underway, it should be initiated.

If backout activity against the object is not already underway, it should be initiated.

If backout activity against the object is not already underway, it should be initiated.

If backout activity against the object is not already underway, it should be initiated.

If backout activity against the object is not already underway, it should be initiated.

If backout activity against the object is not already underway, it should be initiated.

If backout activity against the object is not already underway, it should be initiated.

If backout activity against the object is not already underway, it should be initiated.

If backout activity against the object is not already underway, it should be initiated.

If backout activity against the object is not already underway, it should be initiated.

If backout activity against the object is not already underway, it should be initiated.

If backout activity against the object is not already underway, it should be initiated.

If backout activity against the object is not already underway, it should be initiated.

If backout activity against the object is not already underway, it should be initiated.

If backout activity against the object is not already underway, it should be initiated.

If backout activity against the object is not already underway, it should be initiated.

If backout activity against the object is not already underway, it should be initiated.

If backout activity against the object is not already underway, it should be initiated.

If backout activity against the object is not already underway, it should be initiated.

If backout activity against the object is not already underway, it should be initiated.

If backout activity against the object is not already underway, it should be initiated.

If backout activity against the object is not already underway, it should be initiated.

If backout activity against the object is not already underway, it should be initiated.

If backout activity against the object is not already underway, it should be initiated.

If backout activity against the object is not already underway, it should be initiated.

If backout activity against the object is not already underway, it should be initiated.

If backout activity against the object is not already underway, it should be initiated.

If backout activity against the object is not already underway, it should be initiated.

If backout activity against the object is not already underway, it should be initiated.

If backout activity against the object is not already underway, it should be initiated.

If backout activity against the object is not already underway, it should be initiated.

If backout activity against the object is not already underway, it should be initiated.

If backout activity against the object is not already underway, it should be initiated.

If backout activity against the object is not already underway, it should be initiated.

If backout activity against the object is not already underway, it should be initiated.

If backout activity against the object is not already underway, it should be initiated.

If backout activity against the object is not already underway, it should be initiated.

If backout activity against the object is not already underway, it should be initiated.

If backout activity against the object is not already underway, it should be initiated.

If backout activity against the object is not already underway, it should be initiated.

If backout activity against the object is not already underway, it should be initiated.

If backout activity against the object is not already underway, it should be initiated.

If backout activity against the object is not already underway, it should be initiated.

If backout activity against the object is not already underway, it should be initiated.

If backout activity against the object is not already underway, it should be initiated.

If backout activity against the object is not already underway, it should be initiated.

If backout activity against the object is not already underway, it should be initiated.

If backout activity against the object is not already underway, it should be initiated.

If backout activity against the object is not already underway, it should be initiated.

If backout activity against the object is not already underway, it should be initiated.

If backout activity against the object is not already underway, it should be initiated.

If backout activity against the object is not already underway, it should be initiated.

If backout activity against the object is not already underway, it should be initiated.

If backout activity against the object is not already underway, it should be initiated.

If backout activity against the object is not already underway, it should be initiated.

If backout activity against the object is not already underway, it should be initiated.

If backout activity against the object is not already underway, it should be initiated.

If backout activity against the object is not already underway, it should be initiated.

If backout activity against the object is not already underway, it should be initiated.

If backout activity against the object is not already underway, it should be initiated.

If backout activity against the object is not already underway, it should be initiated.

If backout activity against the object is not already underway, it should be initiated.
**DSNT390I • DISPLAY OF DATABASE name action**

**Explanation:** This message indicates the end of a set of DSNT391I and DSNT392I messages, a set of DSNT393I and DSNT394I messages, or a set of DSNT395I and DSNT396I messages.

In this message:
- The 'name' is the name of the database.
- The 'action' is one of the following:

---

**CONTINUES**
The remaining table space and index space names within this database are continued to a new display.

**TERMINATED**
The remaining table space and index space names within this database are terminated.

**ENDS**
The display for this database is complete.

---

**DSNT391I NAME TYPE STATUS PHYERRLOW PHYERRHI CATALOG PIECE**

**Explanation:** This message indicates the beginning of a set of messages used to display information as a result of a DISPLAY DATABASE command when the keywords WEPR, LOCKS, LPL, CLAIMERS, and USE are omitted. (The message appears in one continuous line across the screen, not as shown above.) This message forms the headings of the display and is always followed by multiple DSNT392I messages containing the column data. Refer to message DSNT392I for a description of the data these headings identify.

In this message:
- The space is the table space name or index space name.
- The type is TS for a table space, IX for an index space or LS for a LOB table space.
- The part is the partition number. It is blank for a simple table space or simple index space.
- See DSNT389I for a list of the possible status display strings.
- When a data set supporting the specified table space or index space has physical I/O errors, lo-page is a hexadecimal number identifying the lowest page number containing an I/O error. This column is blank if there are no physical errors.
- When a data set supporting the specified table space or index space has physical I/O errors, hi-page is a hexadecimal number identifying the highest page number containing an I/O error. This column is blank if there are no physical errors.

---

**DSNT392I space type part status lo-page hi-page cat-name**

**Explanation:** This message contains the display information as a result of a DISPLAY DATABASE command when the keywords LOCK, CLAIMERS, LPL, and USE are omitted. This message contains the column data describing the status of a table space or index space in the database listed in the preceding DSNT362I message. This message is always preceded by its column headings in message DSNT391I. The message number for this message is not displayed. However, messages DSNT391I, DSNT392I, and DSNT390I are always produced with a multiple line WTO and are never interrupted.

In this message:
- The space is the table space name or index space name.
- The type is TS for a table space, IX for an index space or LS for a LOB table space.
- The part is the partition number. It is blank for a simple table space or simple index space.
- See DSNT389I for a list of the possible status display strings.
- When a data set supporting the specified table space or index space has physical I/O errors, lo-page is a hexadecimal number identifying the lowest page number containing an I/O error. This column is blank if there are no physical errors.
- When a data set supporting the specified table space or index space has physical I/O errors, hi-page is a hexadecimal number identifying the highest page number containing an I/O error. This column is blank if there are no physical errors.

---

**DSNT393I NAME TYPE PART STATUS CONNID CORRID USERID**

**Explanation:** This message contains the display information as a result of a DISPLAY DATABASE command when the keyword USE is specified. This message contains the headings of the display. (The message appears in one continuous line across the screen, not as shown above.) This message is always followed by multiple DSNT394I messages containing the column data. Refer to message DSNT394I for a description of the data these headings identify.

---

**DSNT394I space type part status conn-id cor-id user-id**

**Explanation:** This message contains the display information resulting from a DISPLAY DATABASE command when the keyword USE is specified. This message contains the column data describing the status of a table space or index space in the database listed in the preceding DSNT362I message. This message is always preceded by message DSNT393I containing the column headings. The message number for this message is not displayed. However, messages DSNT393I, DSNT394I, and DSNT390I are always produced with a multiple line WTO and are never interrupted.

In this message:
- The type is TS for a table space, IX for an index space or LS for a LOB table space.
- The part is TS for a table space or IX for an index space.
- The part is the partition number. It is blank for a simple table space or simple index space.
- See DSNT389I for a list of the possible status display strings.
- The conn-id is a connection identifier for the thread. It is one of the following:
  - BATCH if the thread is from a batch region.
  - TSO if the thread is from a TSO terminal.
  - UTILITY if the thread is from a utility.
  - 'IMS identifier' if the thread is from an IMS terminal.
  - 'CICS identifier' if the thread is from a CICS terminal.
- CONSOLE if the thread is from the console.

- The corr-id is a correlation identifier of the thread associated with the space name. It is one of the following:
  - 'job name' if the thread is from a batch region.
  - 'TSO logon identifier' if the thread is from a TSO terminal.
  - PST#.PSBNAME if the thread is from an IMS terminal.
  - 'entry ID.thread number.tran id' if the thread is from a CICS terminal.
  - CONSOLE if the thread is from the console.
  - '0nn', where 'nn' is a number, if the thread is for a system agent.
  - For distributed database access threads, this field contains the following:
    - While the thread is being created:
      1. '028.DBAA nn', where nn ranges from 01 to 99. This indicates that the database access agent (DBAA) is in its connection processing, which consists of establishing the DBAA thread, and validating and verifying the user's ID. Refer to "Controlling Access to a DB2 Subsystem" in DB2 Administration Guide for descriptions of the authorization checks that might be performed.

      All RACF requests are serialized on a single DB2 RACF service task, which might increase the validation time when multiple DBAAs are being created concurrently.

    - After the thread is created:
      1. For threads using system-directed access and threads using application-directed access from a DB2 requester, this variable displays the correlation ID of the thread at the requesting location.
      2. For threads using application-directed access from a non-DB2 requester, this variable displays the first twelve characters in the DDM external name (EXTNAM) parameter of the DDM EXCSAT command received as part of the SQL CONNECT

- The user-id is one of the following:
  - 'TSO logon identifier' if the thread is from a TSO terminal.
  - 'sign-on id' or the LTERM if the thread is from an IMS message-drive region.
  - AXBUSER if the thread is from an IMS message-driven region and RACF is used.
  - 'PSB name' if the thread is from an IMS nonmessage-driven region and RACF is not used.
  - 'user-id', 'term id', 'tran id' or other, as specific in the resource control table (RCT), if the thread is from CICS.

### DSNT395I NAME TYPE PART STATUS CONNID CORRID LOCKINFO

**Explanation:** This message indicates the beginning of a set of messages used to display information as a result of a DISPLAY DATABASE command when the keyword LOCKS is specified. This message forms the headings of the display. (The message appears in one continuous line across the screen, not as shown above.) This message is always followed by multiple DSNT396I messages containing the column data. Refer to message DSNT396I for a description of the data these headings identify.

### DSNT396I space type part status conn-id corr-id lock

**Explanation:** This message contains the display information that results from a DISPLAY DATABASE command when the keyword LOCKS is specified. This message contains the column data describing the status of a table space or index space in the database listed in the preceding DSNT362I message. This message is always preceded by its column headings in message DSNT395I. The message number for this message is not displayed. However, the messages DSNT395I, DSNT396I, and DSNT390I are always produced with a multiple line WTO and are never interrupted.

In this message:

- The space is the table space name, index space name, or table OBID.
- The type is TS for a table space, IX for an index space, LS for a LOB table space or TB for a table.
- The part is the partition number. It is blank for a simple table space, simple index space, or segmented table space.
- See DSNT389I for a list of the possible status display strings. If the type is TB, the status field is blank.

- The conn-id is a connection identifier for the thread. It is one of the following:
  - BATCH if the thread is from a batch region.
  - TSO if the thread is from a TSO terminal.
  - UTILITY if the thread is from a utility.
  - 'IMS identifier' if the thread is from an IMS terminal.
  - 'CICS identifier' if the thread is from a CICS terminal.
  - CONSOLE if the thread is from the console.

When the displayed lock is a P-lock or a retained lock, conn-id is not specified.

- The corr-id is a correlation identifier of the thread associated with the space name. It is one of the following:
  - 'job-name' if the thread is from a batch region.
  - 'TSO logon identifier' if the thread is from a TSO terminal.
  - PST#.PSBNAME if the thread is from an IMS terminal.
  - 'entry ID.thread number.tran id' if the thread is from a CICS terminal.
  - CONSOLE if the thread is from the console.
  - For distributed database access threads, this field contains the following:
    - While the thread is being created:
1. '028.DBAA nn', where nn ranges from 01 to 99. This indicates that the database access agent (DBAA) is in its connection processing, which consists of establishing the DBAA thread, and validating and verifying the user's ID. Refer to "Controlling Access to a DB2 Sub-system" in DB2 Administration Guide for descriptions of the authorization checks that might be performed.

All RACF requests are serialized on a single DB2 RACF service task, which might increase the validation time when multiple DBAAs are being created concurrently.

- After the thread is created:

1. For threads using system-directed access and threads using application-directed access from a DB2 requester, this variable displays the correlation ID of the thread at the requesting location.

2. For threads using application-directed access from a non-DB2 requester, this variable displays the first twelve characters in the DDM external name (EXTNAM) parameter of the DDM EXCSAT command received as part of the SQL CONNECT command.

corr-id is not specified when the displayed lock is a P-lock or a retained lock.

- The lock describes the type and duration of locks:

  - Transaction locks (also called L-locks) are identified by their corresponding agent's connection and correlation IDs. Multiple locks held by an agent are listed on multiple lines of the report followed by any locks the agent is currently awaiting.

  - Physical locks (P-locks) and retained locks are identified by their DB2 data sharing member names. Multiple P-locks or retained locks held by a DB2 data sharing member are listed on multiple lines of the report followed by any locks the member is currently awaiting.

The lock is composed of a 'lock status' and followed by a dash '-', a 'lock state' followed by a 'lock type', and a 'lock duration' delimited by commas.

- The 'lock status' is a value of:
  - H The lock is held by the agent or the DB2 member.
  - W The agent or the member is awaiting the lock.
  - R The lock is retained.

- The 'lock state' describes the mode of the lock as follows:
  - For L-locks and drain locks,
    - IS A lock with read intentions.
    - IX A lock with update intentions.
  - S A lock with read-only capability.
  - U A lock with update capability.

- For P-locks,
  - IS This DB2 member has R/O interest. The page set or partition is GBP dependent.
  - IX This DB2 member has R/W interest. The page set or partition is GBP dependent.
  - S This DB2 member has R/O interest. The page set or partition is not GBP dependent.
  - SIX This DB2 member has R/W interest. The page set or partition is GBP dependent.
  - NSU This DB2 member has R/W interest. The page set or partition is GBP dependent.
  - X This DB2 member has R/W interest. The page set or partition is not GBP dependent.

- The 'lock type' describes the type of locking as follows:
  - S A table space L-lock
  - T A table L-lock
  - C A cursor-stability read drain lock
  - R A repeatable-read drain lock
  - W A write drain lock
  - P A partition L-lock
  - PP A page set or partition P-lock

- If the 'lock status' is H, the 'lock duration' describes the duration of the lock:
  - A The lock is freed at deallocation.
  - C The lock is freed at commit.
  - H The lock is freed when all cursors are closed.
  - M The lock is freed by the system.
  - P The lock is freed when the plan is complete.
  - I The lock is a page set or partition P-lock. It is released when the pageset or partition data set is closed.

- If the 'lock status' is W, the 'lock duration' is a 2-digit number indicating the wait's position in the local DB2 system's lock waiting queue. When this lock is acquired, its duration is the same as all locks held by the user.
- For a P-lock, the lock is owned by the system, not the user, and its duration is not related to the duration of the locks that are owned by the user.
- Retained locks do not have a lock duration.

All index spaces on tables are implicitly locked with transaction locks at the same level as the table spaces containing those tables. P-locks are acquired by DB2 on index spaces as well as on table spaces.

---

**DSNT397I**

**Explanation:** This message indicates the beginning of a multiple line display generated as a result of a DISPLAY DATABASE command. The format of this multiple line display has three parts:

- The column headers, which are dependent on the keywords issued. The headers are underlined.
- The space information for all spaces and partitions requested by the command
- An ending message to state whether the spaces were displayed or not.

There are five different headers for the DISPLAY DATABASE commands. The headers are dependent on the presence of the keywords: CLAIMERS, LOCKS, USE, LPL, or no keyword. These five different DISPLAY DATABASE command formats are described below.

- **DISPLAY DATABASE CLAIMERS**
  This DISPLAY DATABASE command displays the claims that are on certain table spaces, index spaces, and partitions.

  The column headers in this command are as follows:
  
  NAME TYPE PART STATUS CONNID CORRID CLAIMINFO

  - NAME is the table space name or index space name.
  - TYPE is TS for a table space, IX for an index space, LS for a LOB table space.
  - PART is the partition number. It is blank for a simple table space or simple index space. For nonpartitioned indexes on a partitioned table space, it is the logical partition number preceded by the character L (for example, L01).
  - See DSNT389I for a list of the possible status display strings.
  - For L-locks on LOB table spaces, IS, IX, S, SIX, X
    - IS is a lock with intent to reserve space within the LOB table space.
    - IX is a lock with intent to insert LOBs in the LOB table space.
    - S is a lock which reserves space within the LOB table space.
    - SIX is a lock which allows the owner to read and update LOBs.
    - X is an exclusive lock.
  - If the type is TB, the status field is blank.
  - If the status for an index is blank, then the status information is displayed at the logical partition level.
  - The CONNID is a connection identifier for the thread. It is one of the following:
    - BATCH if the thread is from a batch region.
    - TSO if the thread is from a TSO terminal.
    - UTILITY if the thread is from a utility.
    - 'IMS identifier' if the thread is from an IMS terminal.
    - 'CICS identifier' if the thread is from a CICS terminal.
    - CONSOLE if the thread is from the console.

- For distributed database access threads, this field contains the following:
  - For threads using system-directed access and for threads using application-directed access from a DB2 Version 3 or later requester, this variable displays the connection name of the thread at the requesting location.
  - For threads using application-directed access from a non-DB2 requester or from a DB2 Version 2 Release 3 requester, this field displays the constant SERVER.
  - CORRID is a correlation identifier of the thread associated with the space name. It is one of the following:
    - 'job name' if the thread is from a batch region.
    - 'TSO logon identifier' if the thread is from a TSO terminal.
    - PST#.PSBNAME if the thread is from an IMS terminal.
    - 'entry ID.thread number.tran id' if the thread is from a CICS terminal.
    - CONSOLE if the thread is from the console.
    - 'Onn', where 'nn' is a number, if the thread is for a system agent.
  - While the thread is being created:
    1. '028.DBAA nn', where nn ranges from 01 to 99. This indicates that the database access agent (DBAA) is in its connection processing, which consists of establishing the DBAA thread, and validating and verifying the user's ID. Refer to "Controlling Access to a DB2 Subsystem" in DB2 Administration Guide for descriptions of the authorization checks that might be performed.
    2. All RACF requests are serialized on a single DB2 RACF service task, which might increase the validation time when multiple DBAAAs are being created concurrently.
  - After the thread is created:
    1. For threads using system-directed access and threads using application-directed access from a DB2 requester, this variable displays the correlation ID of the thread at the requesting location.
    2. For threads using application-directed access from a non-DB2 requester, this variable displays the first twelve characters in the connection identifier.
the DDM external name (EXTNAM) parameter of the DDM EXCSAT command received as part of the SQL CONNECT

CLAIMINFO is the type and duration of currently held claims. The claim is composed of a claim class descriptor and a claim duration descriptor.

The claim class descriptor has one of the following values:

- **CS** Cursor stability claim class
- **RR** Repeatable-read claim class
- **WR** Write claim class

The claim duration descriptor describes the duration of the claims as follows:

- **A** The claim is held until deallocation.
- **C** The claim is held until the next commit point.
- **H** The claim is held across commit.

- **DISPLAY DATABASE LOCKS**

This DISPLAY DATABASE command displays the locks that are on certain table spaces, index spaces and partitions.

The column headers in this command are as follows:

```
NAME TYPE PART STATUS CONNID CORRID LOCKINFO
```

- The **NAME** column states the table space name, index space name, or table object ID.
- The **TYPE** column states TS for table space, IX for index, or TB for table.
- The **PART**, **STATUS**, **CONNID**, and **CORRID** columns are described in the DISPLAY DATABASE CLAIMERS section.
- The **conn-id** and **cor-id** are not specified when the display lock is a P-lock or a retained lock (either L-lock or P-lock). For page set P-locks, the DB2 member name is used to identify the lock.
- The **LOCKINFO** describes the type and duration of locks used by corresponding agents identified by their connection and correlation IDs (for transaction locks, which are also called L-locks) or used by corresponding subsystems identified by their DB2 data sharing member names (for physical locks, which are called P-locks, and retained locks). Multiple locks held by an agent are listed on multiple lines of the report followed by any locks the agent is currently awaiting. Multiple P-locks or retained locks held by a DB2 data sharing member are listed on multiple lines of the report followed by any locks the member is currently awaiting. The LOCKINFO consists of a 'lock status', followed by a dash '-', a 'lock state', a 'lock type' and a 'lock duration' delimited by commas.

- **For P-locks,**

- **IS** This DB2 member has R/O interest. The page set or partition is group buffer pool (GBP) dependent.
- **IX** This DB2 member has R/W interest. The page set or partition is GBP-depend.
- **S** This DB2 member has R/O interest. The page set or partition is not GBP-dependent.
- **SIX** This DB2 member has R/W interest. The page set or partition is GBP-depend.
- **NSU** This DB2 member has R/W interest. The page set or partition is not GBP-dependent.
- **X** This DB2 member has R/W interest. The page set or partition is not GBP-dependent.

- **The 'lock type' describes the type of locking as follows:**

- **S** A table space L-lock
- **T** A table L-lock
- **C** A cursor-stability read drain lock
- **R** A repeatable-read drain lock
- **W** A write drain lock
- **P** A partition L-lock
- **PP** A page set or partition P-lock

- **If the 'lock status' is H,** the 'lock duration' describes the duration of the lock:

- **A** The lock is freed at deallocation.
- **C** The lock is freed at commit.
- **H** The lock is freed when all cursors are closed.
- **M** The lock is freed by the system.
- **P** The lock is freed when the plan is complete.
- **I** The lock is a page set or partition P-lock. It is released when the page set or partition data set is closed.

- **If the 'lock status' is W,** the 'lock duration' is a 2-digit number indicating the waiter’s position in the local DB2 system’s lock waiting queue. When this lock is acquired, its duration is the same as all locks held by the user.

- For a P-lock, the lock is owned by the system, not the user, and its duration is not related to the duration of the locks that are owned by the user.
- Retained locks do not have a lock duration.
There are no explicit index space locks. However, all index spaces on tables are implicitly locked at the same level as the table spaces containing those tables. P-locks are acquired by DB2 on index spaces as well as on table spaces.

- **DISPLAY DATABASE USE**
This DISPLAY DATABASE command displays the user IDs that are accessing certain table spaces, index spaces, and partitions.

The column headers in this command are as follows:

<table>
<thead>
<tr>
<th>NAME</th>
<th>TYPE</th>
<th>PART</th>
<th>STATUS</th>
<th>CONNID</th>
<th>CORRID</th>
<th>USERID</th>
</tr>
</thead>
</table>

- The **USERID** is one of the following:
  - 'TSO logon identifier' if the thread is from a TSO terminal.
  - 'sign-on id' or the **LTERM** if the thread is from an IMS message-drive region.
  - **AXBUSER** if the thread is from an IMS message-driven region and RACF is used.
  - 'PSB name' if the thread is from an IMS nonmessage-driven region and RACF is not used.
  - 'userid', 'term id', 'tran id' or other, as specified in the resource control table (RCT), if the thread is from CICS.

- **DISPLAY DATABASE LPL**

<table>
<thead>
<tr>
<th>NAME</th>
<th>PART</th>
<th>STATUS</th>
<th>LPL</th>
<th>PAGES</th>
</tr>
</thead>
</table>

This message contains the display information resulting from a DISPLAY DATABASE command when the keyword LPL is specified. It contains the column data describing the status of a table space or index space in the database listed in the preceding DSNT362I message. This message is always preceded by its column headings message DSNT305I. The message number for this message is not displayed.

In this message:
- The **LPL PAGES** column lists the pages in the specified space that are unavailable because of logical or physical damage.

- **DISPLAY DATABASE (with no LOCKS, USE, LPL or CLAIMERS keyword).**

This DISPLAY DATABASE command displays the error range information for certain table spaces, index spaces, and partitions.

The column headers in this command are as follows:

<table>
<thead>
<tr>
<th>NAME</th>
<th>TYPE</th>
<th>PART</th>
<th>STATUS</th>
<th>LPL</th>
<th>PIECE</th>
<th>PHYERRLO</th>
<th>PHYERRHI</th>
</tr>
</thead>
</table>

- The **MEMBER NAME** member-name

This message is issued with messages DSNT389I, DSNT394I or DSNT396I for each thread in a data sharing environment. This additional line reports the member name of the DB2 subsystem accessing this object.

If the characters 'CO' follow the member name, then this member is the castout owner for the page set or partition. The castout owner for a page set or partition is the DB2 member responsible for doing all of the castout I/O for that page set or partition.

The message number and subsystem recognition character are not included in this message.

- **INVALID space-name**
The space-name specified in the SPACENAM keyword on
the -DISPLAY DATABASE command does not exist. The
name of the table space or index space is 'space-name'.
The request is rejected.

• NO SPACES FOUND

This message is produced when a DISPLAY DB(name) SPACENAM is entered and no spaces were found to satisfy the request. SPACENAM(...) might have been entered as a range, a subset, or a list of spaces.

• spacetype name NOT type

This message is produced when no table space or index space listed in the DISPLAY DB(...) SPACENAM(...) satisfies your request.

  spacetype TABLESPACE if the space is a table space or INDEXSPACE if the space is an index space.

  name The name of the space.

  type A character string that indicates the type of request specified. The string is a list of the following, delimited by 'OR':

  • ACTIVE if the keyword ACTIVE is specified
  • RESTRICTED if the keyword RESTRICT is specified.

• NO INFORMATION AVAILABLE

This message is produced when there is no LOCK or USE information available. When DISPLAY DB(...) is entered, and DB(...) is a list of databases or a list of names, this message indicates that no listed database has LOCK or USE information available.

If DISPLAY DB(...) or DISPLAY DB(...) SPACENAM(*) is entered, and DB(...) is a range or subset of databases, or all databases ('**'), this message indicates that no databases, for which the invoker has authority to display, have LOCK or USE information available. This message is produced only when the keywords USE and LOCKS are specified.

The ending message looks like this:

* DISPLAY OF DATABASE name action *

In this message:

  name The name of the database

  action One of the following:

  • CONTINUES The remaining table space and index space names within this database are continued to a new display.
  • TERMINATED The remaining table space and index space names within this database are terminated.
  • ENDS The display for this database is complete.

**Example:**

**DSNT398I**

**Explanation:** This message appears within a multiple line WTO message set and precedes DSNT391I, DSNT393I, and DSNT395I. It is used to underscore the column headings.

This message is issued by CSECT: DSNTDMUL

**DSNT399I** INVALID space-name

**Explanation:** The space-name specified in the SPACENAM keyword on the -DISPLAY DATABASE command does not exist. The name of the table space or index space is 'space-name'. The request is rejected.

**DSNT400I** SQLCODE = 0, SUCCESSFUL EXECUTION

**Explanation:** The SQLCODE was 0, indicating successful execution of the function. SQLWARN indicators may note some warnings. SQLWARNN fields are described in Appendix C of DB2 SQL Reference.

**DSNT401I** DSNT401I WARNING - HELP IS NOT INSTALLED

**Explanation:** You invoked the installation process with the DSNTINST CLIST. To enable online help, you must use the DSNTINS0 CLIST instead of the DSNTINST CLIST.

This message is issued by panel: DSNTPA1

**System Action:** The panel is displayed with the warning message.

**User Response:** No response is necessary if you do not desire online help for the panel. Press ENTER to continue with the installation process after filling in desired panel values. If panel help is desired: exit this panel, make sure BookManager or the online help reader is installed on your system, and invoke the installation process with the DSNTINS0 CLIST.

**DSNT402I** ONLINE BOOK DATA SET NAMES MUST END IN '.BOOK'

**Explanation:** All book names entered on this panel must end in '.BOOK'.

This message is issued by panel: DSNTPA0

**System Action:** The panel is redisplayed with the error message.

**User Response:** Replace the book name or names with a value that ends in '.BOOK'.

**DSNT404I** SQLCODE = xxx, explanation

**Explanation:** This message contains an SQL return code and a brief explanation, with text inserted from the SQLERRM field. The SQL return code is positive, indicating a warning condition. For more information about this SQL return code, see Section 2, SQL Return Codes on page 17.

**System Programmer Response:** Determine the cause for the SQL warning code, and correct the situation if needed. Rerun the application program or SQL statement.

**DSNT405E** csect-name DISPATCH PRIORITIES NOT IN SYNC: cccccccc1: hhh1 COMPARED TO ccccccc2: hhh2

**Explanation:** The dispatch priorities of task 'ccccccc1' (dispatch priority 'hhh1') and task 'cccccc2' (dispatch priority 'hhh2') are found to be incorrect in relation to each other. This can cause severe performance problems and possible failure of either task 'ccccccc1', task 'cccccc2', or other tasks.

**System Action:** DB2 continues with possible problems described above.

**Operator Response:** Notify the system programmer.
System Programmer Response: Modify the dispatch priority algorithms for the two tasks to meet documented requirements. For instance, IRLM must have a higher dispatch priority than DB2.

# DSNT406I THE ART/ORT ESCAPE CHARACTER CANNOT BE % OR _

Explanation: You specified the percent sign (%) or the underscore character (_) as the application registration table/object registration table (ART/ORT) escape character. The ART/ORT escape character can be any other character.

System Action: The panel is redisplayed and the cursor is placed on the field that produced the error.

User Response: Change the ART/ORT escape character value.

# DSNT407I THIS FIELD HAS AN INVALID FORMAT

Explanation: The field must be NOLIMIT, 1440, 0, or minutes and seconds separated by a comma. This message is issued by the following panel: DSNTIPA

System Action: The panel is redisplayed and the cursor is placed on the field in error.

User Response: Correct the input.

# DSNT408I SQLCODE = -xxx, explanation

Explanation: This message contains an SQL return code and a brief explanation, with text inserted from the SQLERRM field. The SQL return code is negative, indicating that an error has occurred. For more information about this SQL return code, see [Section 2. SQL Return Codes on page 17]

System Programmer Response: Determine the cause for the SQL error by using information about that specific SQLCODE. Correct the error if desired. Rerun the application program or SQL statement.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 2, 5, 14, 17.

# DSNT409I BUFFERPOOL SIZES SHOWN MAY BE OBSOLETE

Explanation: The buffer pool sizes shown here were set at installation or migration time and might not be the most current. Updates might have occurred using the ALTER BUFFERPOOL command. This message is issued by the following panels: DSNTIP1, DSNTIP2, DSNTIP6

System Action: Processing continues.

User Response: No response is required.

# DSNT410I THE SUBSYSTEM COMMAND PREFIX ENTERED IS INCORRECT

Explanation: You entered an incorrect command prefix. The first character of the command prefix must be one of the following:

\@ \$ \# \^ \_ / \' ? \* \% \<
\> \^ \* \- \c \: \; \| 

The remaining characters of the command prefix must be one of the above: A-Z, or 0-9.

This message is issued by the following panel: DSNTIPM

System Action: The panel is redisplayed and the cursor is placed on the field in error.

User Response: Enter a valid command prefix

# DSNT411I SQLCAID = xxxx, SQLCA IDENTIFIER

Explanation: The SQLCA ID field (SQLCAID) is not the expected value, C ‘SQLCA’.

System Programmer Response: The SQLCA area is invalid. This type of error is usually the result of one of the following:

• Calling the DSNTIAR formatting routine before an SQL statement initializes the area
• Overlaying the SQLCA area
• Passing the wrong address to the DSNTIAR routine.

Correct the error, and rerun the application program.

# DSNT412I SQLCABC = xxxx, SQLCA BYTE COUNT

Explanation: The size of the SQLCA is not the expected value (136 bytes).

System Programmer Response: The SQLCA area is invalid. Correct the error. It is probably an overlay or an incorrect SQLCA address. Rerun the application program.

# DSNT413I SQLCODE = xxxx, INVALID SQLCODE

Explanation: The SQL return code is not a valid value.

System Programmer Response: Either the SQLCA area is invalid or the maintenance was not coordinated correctly. As a result, the SQL return code was added to the DB2 subsystem but not to the formatting routine.

An invalid SQLCA area is usually the result of one of the following:

• Calling the DSNTIAR formatting routine before an SQL statement initializes the area
• Overlaying the SQLCA area
• Passing the wrong address to the DSNTIAR routine.

If the maintenance was not coordinated correctly, the DSNTIAR and DSNTIAM CSECTs were probably not replaced in the code that is now running. Link-edit the load module, and replace DSNTIAR and DSNTIAM. Correct the error, and rerun the application program.

# DSNT414I SQLERRM = xxxx, SQLCA ERROR MESSAGE INSERTION TEXT

Explanation: This message results from an SQL return code that is not recognized by DSNTIAR. SQLERRM contains error message text.

System Programmer Response: Either the SQLCA area is invalid or the maintenance was not coordinated correctly. As a result, the SQL return code was added to the DB2 subsystem but not to the formatting routine.

An invalid SQLCA area is usually the result of one of the following:

• Calling the DSNTIAR formatting routine before an SQL statement initializes the area

344 Messages and Codes
Overlaying the SQLCA area

Passing the wrong address to the DSNTIAR routine.

If the maintenance was not coordinated correctly, the DSNTIAR and DSNTIAM CSECTs were probably not replaced in the code that is now running. Link-edit the load module, and replace DSNTIAR and DSNTIAM. Correct the error, and rerun the application program.

**DSNT415I** SQLERRP = xxxx, SQL PROCEDURE DETECTING ERROR

_**Explanation:**_ The name of the procedure detecting the error is provided in the SQLERRP.

_**System Programmer Response:**_ (The SQL procedure detecting the error may be of help in diagnosing an error or warning.) Correct the error if there is one noted in other messages. Rerun the program or SQL statement.

**DSNT416I** SQLERRD = xx,xx,xx,xx,xx,xx SQL DIAGNOSTIC INFORMATION

_**Explanation:**_ At least one of the six diagnostic fields is not the expected value. The expected values are:

- 00, 00, 00, 00, 00, 00 or
- 00, 00, 00, -1, 00, 00

The SQL diagnostic information for each of the six values is as follows:

1. DB2 unique internal relational data system code
2. DB2 internal data manager error code
3. One of the following:
   - Number of rows inserted, updated, or deleted following an INSERT, UPDATE, or DELETE statement
   - Note: A `-1` in this field indicates that a mass delete of a table in a segmented table space was performed, wherein DB2 does not access nor count individual rows.
   - For SQLCODE -911 or -913, a reason code that indicates whether a deadlock or timeout occurred.
   - Note: The most common reason codes are:
     - `00C90088` - deadlock
     - `00C9009E` - timeout
4. Reserved
5. Position or column of a syntax error for PREPARE or EXECUTE IMMEDIATE
6. DB2 internal buffer manager error code

_**System Programmer Response:**_ Refer to Appendix C of *DB2 SQL Reference* for further information on the contents of the SQLERRD fields. The SQL diagnostic information may be of help in diagnosing an error or in indicating the results of successful execution. If this error or warning should not occur, correct the error. Rerun the program or SQL statement.

**DSNT417I** SQLWARNn-n SQL WARNINGS

_**Explanation:**_ At least one of the 11 warning values is not the expected value (a blank). A nonblank value in one of the 11 warning fields has the following meaning:

- `SQLWARN0`: Any other warning code is set.
- `SQLWARN1`: String truncation.
- `SQLWARN2`: Null value(s) eliminated.
- `SQLWARN3`: Number of host variables provided did not equal degree of the table.
- `SQLWARN4`: No WHERE clause on UPDATE or DELETE.
- `SQLWARN5`: No WHERE clause on UPDATE or DELETE.
- `SQLWARN6`: Date or timestamp value adjusted.
- `SQLWARN7`: Conversion of decimal number from precision 31 to precision 15 caused truncation of fractional digits.
- `SQLWARN8`: Untranslatable character replaced with substitute.
- `SQLWARN9`: Arithmetic exceptions have been ignored during processing of COUNT DISTINCT.
- `SQLWARNA`: At least one character field of the SQLCA is invalid due to a string translation error.

_**User Response:**_ The SQL warning information may be of help in diagnosing an error or in indicating the results of successful execution. If this warning should occur, correct the error and rerun the program or SQL statement.

**DSNT418I** SQLSTATE = sqlstate, SQLSTATE RETURN CODE

_**Explanation:**_ The SQLSTATE is a return code that indicates the outcome of the most recently executed SQL statement. The execution of every SQL statement sets SQLSTATE to a five-digit code in the range of 00000 to 65535. This has no effect on the existing use of any other field in the SQLCA.

_**User Response:**_ For further information on the meaning of an SQLSTATE return code, see the "Section 2. SQL Return Codes" on page 17. If necessary, correct the SQL statement and return it.

**DSNT419I** WARNING - MAX REMOTE ACTIVE PREVIOUSLY SPECIFIED AS 0.

_**Explanation:**_ You specified a value of 0 for the number of active database access threads on a previous panel. This value might be inconsistent with a DDF STARTUP OPTION of AUTO or COMMAND.

This message is issued by the following panel: DSNTIPR

_**Severity:**_ 4 (warning)

_**System Action:**_ The panel is redisplayed and the cursor is placed on the DDF STARTUP OPTION field.

_**User Response:**_ No response is necessary if your intent is to have DDF started with no active database access threads allocated and DDF is used as a requester only. Press ENTER to continue. Otherwise, either change the DDF STARTUP OPTION to NO or MAX REMOTE ACTIVE to the number of threads you want.
DSNT420I  YOU NEED AT LEAST 1 32K DS IF THE TEMP 32K SPACE IS GREATER THAN 0
Explanation: You entered zero for the TEMP 32K DATA SETS field on the SIZES panel. You need at least one TEMP 32K DATA SET if TEMP 32K SPACE on DSNTIPD is not zero.
This message is issued by the following panel: DSNTIPD
System Action: The panel is redisplayed and the cursor is placed on the field in error.
User Response: Enter a value of one or greater for the TEMP 32K DATA SETS field or change the TEMP 32K SPACE value to zero.

DSNT421I  YOU NEED AT LEAST 1 32K BUFFER FOR THE <num32kds> 32K DATA SETS
Explanation: You specified zero for the 32KB buffers. If field TEMP 32K DATA SETS on installation panel DSNTIPD is greater than zero, you need at least one 32KB buffer on installation panel DSNTIP2.
This message is issued by the following panel: DSNTIP2
System Action: The panel is redisplayed and the cursor is placed on the field in error.
User Response: Enter a value of 1 or more for at least one of the buffer pools (BP32K - BP32K9) on panel DSNTIP2, or change the TEMP 32K DATA SETS value to zero.

DSNT422I  THE ART TABLE NAME MUST BE DIFFERENT FROM THE CRT TABLE NAME
Explanation: You entered the same name for the Application Registration Table and the Object Registration Table on the Data Definition Control Support panel.
This message is issued by the following panel: DSNTIPZ
System Action: The panel is redisplayed and the cursor is placed on the field in error.
User Response: Change either the APPL REGISTRATION TABLE field or the OBJT REGISTRATION TABLE field to make these two fields unique with respect to each other.

DSNT424I  OUTPUT DATA SETS MUST BE DIFFERENT FROM THE INPUT DATA SETS
Explanation: You specified an output data set name that is the same as one of the input data set names built from the PREFIX and SUFFIX fields on the main panel DSNTIPA1.
This message is issued by the following panel: DSNTIPA1
System Action: The panel is redisplayed and the cursor is placed on the field in error.
User Response: Either change the data set name under the cursor or change the PREFIX or SUFFIX fields on panel DSNTIPA1.

DSNT425I  ALL THREE OUTPUT DATA SETS MUST BE UNIQUE
Explanation: You specified the same name for two or more of the output data sets.
This message is issued by the following panel: DSNTIPV
System Action: The panel is redisplayed and the cursor is placed on the field in error.
User Response: Change the data set name under the cursor or the data set field(s) that are the same as the one under the cursor.

DSNT426I  ALL THREE DATA SETS ARE REQUIRED FOR OUTPUT
Explanation: You specified one or more output data sets and left one or more output data set fields blank.
This message is issued by the following panel: DSNTIPT
System Action: The panel is redisplayed and the cursor is placed on the field in error.
User Response: You must specify all or none of the output data set fields. Leave blank all output data set fields if you do not want the installation CLIST to edit any CLISTs or JCL.

DSNT427I  THE DATA SET OR MEMBER SPECIFIED COULD NOT BE LOCATED
Explanation: The input parameter member for the INPUT MEMBER NAME field or the DATA SET NAME(MEMBER) field for migration could not be found.
This message is issued by the following panel: DSNTIPA1
System Action: The panel is redisplayed and the cursor is placed on the field in error.
User Response: Verify that you entered an existing data set and member in that data set. Also verify that the data set is cataloged.

DSNT428I  WHEN USING TIMESTAMPS, THE PREFIX MUST BE <= preflen CHARACTERS LONG
Explanation: YOU HAVE ENTERED AN ARCHIVE LOG PREFIX LONGER THAN ALLOWED. The archive log prefix names must not exceed 19 characters when the TIMESTAMP ARCHIVES value is YES and must not exceed 17 characters when the TIMESTAMP ARCHIVES value is EXT.
This message is issued by the following panel: DSNTIPH
System Action: The panel is redisplayed and the cursor is placed on the field in error.
User Response: Reduce the length of the prefix or change the TIMESTAMP ARCHIVES value to NO.

DSNT429I  THE SUM OF MAX USERS AND MAX REMOTE ACTIVE MUST BE <= 2000
Explanation: The total number of threads determined by MAX USERS and MAX REMOTE fields is too large.
This message is issued by the following panel: DSNTIPE
System Action: The panel is redisplayed and the cursor is placed on the field in error.
User Response: Reduce the MAX USERS field, or the MAX REMOTE field, or both.
DSNT430I  THIS FIELD MAY ONLY BE FILLED IN FOR MIGRATE MODE
Explanation: You can only specify the FROM RELEASE or DATA SET NAME(MEMBER) fields for INSTALL TYPE of MIGRATE.
This message is issued by the following panel: DSNTIPA1
System Action: The panel is redisplayed and the cursor is placed on the field in error.
User Response: Change the INSTALL TYPE to MIGRATE or blank out the field under the cursor.

DSNT431I  DDF, MIXED DATA, OR DEF ENCODING SCHEME CONFLICTS WITH CODED CHAR SET
Explanation: You have entered an invalid EBCDIC or ASCII coded character set (CCSID) value for the DDF, MIXED DATA, or DEF ENCODING SCHEME value you specified. The following restrictions apply to these values:
- With a MIXED DATA value of ‘YES’, you must choose a valid mixed CCSID value for the EBCDIC CODED CHAR SET. The ASCII CODED CHAR SET must be a valid mixed value or zero.
- With a MIXED DATA value of ‘NO’, you must choose a valid SBCS CCSID value or zero for EBCDIC or ASCII CODED CHAR SETs.
- With a DDF value of ‘AUTO’ or ‘COMMAND’, you must choose a non-zero value for the EBCDIC CODED CHAR SET.
- With a DEF ENCODING SCHEME value of ‘ASCII’, you must choose non-zero values for EBCDIC and ASCII CODED CHAR SETs.
Refer to Appendix C of DB2 Installation Guide for a list of the best general CCSID for each country.
This message is issued by the following panels: DSNTIPF, DSNTIPR
System Action: The panel is redisplayed and the cursor is placed on the field in error.
User Response: Correct either the DDF, MIXED DATA, or DEF ENCODING SCHEME value or the EBCDIC or ASCII CODED CHAR SET value to correct the incompatibility.

DSNT433I  MAX REMOTE ACTIVE MUST BE <= MAX REMOTE CONNECTED.
Explanation: The number of active database access threads cannot be larger than the number of concurrent database access threads.
This message is issued by the following panel: DSNTIPE
Severity: 8 (error)
System Action: The panel is redisplayed and the cursor is placed on the field in error.

User Response: Reduce the MAX REMOTE ACTIVE field, increase the MAX REMOTE CONNECTED field, or both.

DSNT434I  WARNING, DATA SETS MARKED WITH ASTERISKS EXIST AND WILL BE OVERWRITTEN
Explanation: The data sets marked with asterisks already exist. If you continue, the installation process will delete the existing data set and allocate a new one for tailored job output.
This message is issued by the following panel: DSNTIPT
Severity: 4
User Response: You should:
1. Press ENTER to continue; the data set(s) will be deleted and reallocated OR
2. Press RETURN to leave the installation process; the data set(s) will not be deleted OR
3. Change the data set name(s); the new name will be checked for existence.

DSNT435I  DSNT435I OVERRIDE VALUES ARE IN EFFECT
Explanation: Calculated values for EDMPOOL, SORTPOOL, or RIDPOOL on panel DSNTIPC were previously overridden. Installation uses any override values displayed.
Severity: 4
System Action: Override values are used instead of calculated values, when displayed.
User Response: No response is necessary if you want to use the override values. If you want to use the calculated values, erase the values in the override column.

DSNT436I  REGION SIZE MAY BE TOO LARGE
Explanation: The numbers you specified produced a region size estimate of more than 5000KB. This region size estimate does not include the storage required for SWA because it is assumed that SWA has been placed above the line. If a larger private area is permitted, you should increase the region size on the DB2 start procedures. The region size calculation is shown in the DSNT485I through DSNT487I messages and is discussed in Section 2 of DB2 Installation Guide.
This message is issued by the following installation CLIST: DSNTINST
Severity: 4 (warning)
System Action: The CLIST continues.
User Response: Check the values entered for numbers of concurrent users and databases, buffers, and plan sizes. Check the available private region size. If this region size is not permitted, these numbers need to be reduced. If the size is permitted, this warning can be ignored.
Problem Determination: If you suspect an error in the process, set CONTROL(CONLIST) and invoke the CLIST. This produces tracing for error documentation.
DSNT437I  REGION SIZE IS TOO LARGE
Explanation:  The numbers you specified produced a region size estimate of more than 8000KB. This estimate does not include the storage required for SWA, because it is assumed that you placed SWA above the 16MB line. The region size calculation is discussed in Section 2 of DB2 Installation Guide.

This message is issued by the following installation CLIST: DSNTINST
Severity:  8 (error)
System Action:  The CLIST continues, but does not produce edited jobs.
User Response:  Check the numbers entered for numbers of concurrent users and databases, buffers, and plan sizes. One or more of these numbers needs to be reduced.

Problem Determination:  If you suspect an error in the process, set CONTROL(CONLIST) and invoke the CLIST. This produces tracing for error documentation.

DSNT438I  WARNING, IRLM LOCK MAXIMUM SPACE = irlmreg K, AVAILABLE SPACE = irlmav K
Explanation:  You specified a maximum number of locks per user that could use a total space larger than that available to the IRLM, causing it to abort. It is not likely that all threads will have the maximum number of locks, but if the maximum exceeds the amount of space by a significant factor, the possibility of aborts in the IRLM is increased.

If the CROSS MEMORY value from the DSNTIPJ installation panel is YES, the private region size is the space available for the IRLM. The available space is estimated as 60000K since extended private address space is used. If the CROSS MEMORY value is NO, then the MAXIMUM ECSA value space is available for the IRLM. The maximum space used is estimated as the MAX USERS value from the DSNTIPE panel times the number of LOCKS PER USER value on the DSNTIPJ panel times 250 bytes per lock.

This message is issued by the following installation CLIST: DSNTINST
Severity:  4 (warning)
System Action:  The panel is redisplayed and the cursor is placed on the field in error.
User Response:  Choose one of the following responses:
- Ensure that you can run with the overcommitment of lock address space, or
- Lower the value of the MAX USERS or LOCKS PER USER field.

DSNT439I  IRLM NO LOCK ESCALATION OR NO USER MAXIMUM
Explanation:  You specified the number 0 for:
- The number of table or table space locks that will cause lock escalation, or
- The number of locks that will terminate a DB2 user.

A lock escalation value of 0 turns off lock escalation and means that DB2 cannot use this means of conserving lock space. A user maximum of 0 means that the calculation noted in the DSNT438 message cannot be performed to see if the IRLM has sufficient address space for all users, since there is no maximum per user.

This message is issued by the following installation CLIST: DSNTINST
Severity:  4 (warning)
System Action:  The CLIST will continue. This is only a warning.
User Response:  Turn off lock escalation and/or user lock limiting.

DSNT440I  TOTAL BP SIZE TOO LARGE
Explanation:  The total size of a VIRTUAL or HIPER buffer pool is too large. The summation of the ssnmDBM1 address space storage requirements for all virtual buffer pools cannot exceed 1.6GB, and the total number of buffers cannot exceed 8,000,000. When calculating the storage requirements for the virtual buffer pools, DB2 uses the page size (4K, 8K, 16K, or 32K) for each VPTYPE(PRIMARY) buffer and 128 bytes for each VPTYPE(DATASPACE) buffer. For hiperpools, the maximum is 8GB.

This message is issued by the following panels: DSNTIP1, DSNTIP2, DSNTIP6
System Action:  The panel is redisplayed and the cursor is placed on the field in error.
User Response:  Reduce one or more of the buffer pool sizes.

DSNT441I  INVALID HIPERPOOL SIZE
Explanation:  If a nonzero hiperpool value is specified, the corresponding virtual buffer pool value must also have a nonzero value. For example, if a nonzero value is specified for the BP1 hiperpool size, then the value for the BP1 virtual buffer pool size must be greater than zero.

This message is issued by the following panels: DSNTIP1, DSNTIP2
System Action:  The panel is redisplayed and the cursor is placed on the field in error.
User Response:  Enter a value greater than zero for the virtual buffer pool size or reduce the value for the hiperpool size to zero.

DSNT442E  ERROR, VIRTUAL STORAGE OF main EXCEEDS THE SYSTEM LIMIT OF 2 GIGABYTES
Explanation:  The total of all virtual storage calculations exceeds the maximum amount possible for an address space.

This message is issued by the following CLIST: DSNTINST
Severity:  8 (error)
System Action:  The installation CLIST returns to the initial panel without editing the installation jobs.
User Response:  Respecify installation values that determine storage sizes so that the 2 GB limit is not exceeded.
VALUES MARKED WITH AN ASTERISK HAVE BEEN UPDATED

Explanation: An asterisk is placed before the description of fields which were generated by the DSNTINST CLIST. This message only appears when you update field(s) from a prior panel used to generate the fields on the current panel.

This message is issued by the following panels: DSNTIPA, DSNITPL

System Action: The panel is displayed.

User Response: Verify that the current value is what you want. If it is not, enter the desired value.

SCROLLING BACKWARD MAY CHANGE FIELDS MARKED WITH ASTERISKS

Explanation: The marked fields on the current panel are generated from fields on other panels. If you scroll backward, these fields may be updated to reflect new values from other panels. For example, the ARCHIVE PREFIX field is generated from the CATALOG ALIAS field on DSNTIPA2. Message DSNT443I will be displayed to inform you when fields are changed by the DSNTINST CLIST.

This message is issued by the following panels: DSNTIPA, DSNITPL

System Action: The panel is displayed.

User Response: No action required.

REMOTE LOCATION NAME MUST NOT BE THE SAME AS LOCAL LOCATION

Explanation: The name entered for the remote sample location was the same as the local location name.

This message is issued by the following installation panel: DSNTIPY

System Action: The panel is displayed.

User Response: Enter a remote location name or leave the field blank to indicate that the organization sample will only be executed locally.

SAMPLE LOCATION MUST BE BLANK IF LOCAL LOCATION IS BLANK

Explanation: In order to edit the remote sample jobs, both the DB2 LOCATION NAME (local location) on panel DSNTIPR and the REMOTE LOCATION must have valid names. If the DB2 LOCATION NAME is unknown, leave both fields blank and the remote sample jobs will not be edited.

This message is issued by the following panel: DSNTIPY

System Action: The panel is displayed.

User Response: Either scroll back to the DISTRIBUTED DATA FACILITY panel and enter a value for the DB2 LOCATION NAME, or enter a blank in the REMOTE LOCATION field on the job editing panel.

RECOMMEND REAL STORAGE = size K

Explanation: This is the estimated amount of real storage recommended to support the virtual storage sizes chosen.

The amount of real storage needed will vary greatly. Some customers will find that they need several times the estimate shown. For more information on storage calculations, refer to Section 2 of DB2 Installation Guide.

This message is issued by the following CLIST: DSNTINST

Severity: 0 (successful execution)

System Action: The CLIST continues.

User Response: Compare this recommended value with the actual available real storage.

NUMBER OF LOGS REDUCED FROM old-num TO MAXIMUM OF 31

Explanation: The number of active log data sets used in the DB2 release you are migrating from is greater than the new maximum number of data sets allowed for the current release of DB2. Installation job DSNTIJUZ will update your bootstrap data sets to contain only the last 31 data sets.

This message is issued by the following panel: DSNITPL

System Action: The value is reduced to the maximum of 31 and the panel is displayed.

User Response: Update any other fields on the panel and continue.

type ENTRY MUST BE EXACTLY TWO CHARACTERS

Explanation: These entries are used to complete SYS1.PARMLIB member names and must be exactly two characters. The type is:

APF AUTH For the APF-authorized library list
IEAAPFx
LINK LIST For the link list library concatenation
LNKLSTxx
MVS SUBSYS For the MVS subsystem list IEFSSNx

This message is issued by the following installation CLIST: DSNTINST

Severity: 8 (error)

System Action: The CLIST will continue.

User Response: Check your entries for these fields on the MVS panel and make them exactly two characters. See job DSNTIJMV that was produced and correct the IEBUPDTE CHANGE statement.

WARNING-THE LOCAL DATE LENGTH OR LOCAL TIME LENGTH HAS BEEN INCREASED

Explanation: The LOCAL DATE LENGTH or LOCAL TIME LENGTH has been increased and a REBIND command must be issued for any dependent plans.

This message is issued by the following installation CLIST: DSNTINST

Severity: 4 (warning)

System Action: Processing continues.

User Response: Rebind all application plans that depend upon the length of the local format that was changed.
Problem Determination:
CLIST are at the same level.

User Response:
Be sure the parameter member and the CLIST are at the same level.

System Action:
The CLIST will terminate.

Explanation:
An error was encountered during CLIST processing for reading the parameter member. Most of these errors are caused by having a mismatch between the level of the CLIST and that of the parameter member being read.

The 'errcode' is an error code defined for the CLIST. The error code values and associated meanings are found in TSO/E CLISTS.

The 'count' value is the number of parameter values already read.

This message is issued by the following installation CLIST: DSNTINST

Severity:
8 (error)

System Action:
The CLIST will continue, but will not produce edited jobs or parameter data.

User Response:
See message DSNT465I for the CLIST action.

Explanation:
The variable named 'varname' does not have a valid value. Its current value is 'value'. Subsequent messages will describe the reason the value is invalid and the action taken by the CLIST.

If the error is in the CONTROL value, the value was specified when the CLIST was invoked. The value is not valid, and no additional tracing will be done. The permitted values are NONE, LIST, CONLIST, and SYMLIST. Each value produces more CLIST tracing information than those which precede it. If the error is in other values, the value was specified when the CLIST was invoked on the ISPF panels.

This message is issued by the following installation CLIST: DSNTINST

Severity:
8 (error)

System Action:
The CLIST will continue, but will not produce edited jobs or parameter data.

User Response:
Check the subsequent messages. Exit, then invoke the CLIST with a valid value for the variable.

Problem Determination:
If you suspect an error in the process, set CONTROL(CONLIST) and invoke the CLIST in batch, so that the tracing can be sent with the error documentation. You will also need the listing of the CLIST and the parameter member being read.

Explanation:
The variable named in message DSNT456I must be an integer. Only digits are allowed, with no decimal point or fractions. If the value is a number suffixed by K or M, it is interpreted as the indicated number multiplied by 1024 or 1048676. If any other non-numeric character is present in the value, or if the K or M is not the final character, this message is produced.

This message is issued by the following installation CLIST: DSNTINST

Severity:
8 (error)

System Action:
The CLIST will continue, but will not produce edited jobs or parameter data.

User Response:
See message DSNT465I for the CLIST action.

Explanation:
The variable named in message DSNT456I must be larger than its current value. The minimum value allowed is 'min'.

This message is issued by the following installation CLIST: DSNTINST

Severity:
8 (error)

System Action:
The CLIST will continue, but will not produce edited jobs. The CLIST resets the incorrect value to 'min'.

User Response:
See message DSNT465I for the CLIST action.

Explanation:
The variable named in message DSNT456I must be smaller than its current value. The maximum value allowed is 'max'.

This message is issued by the following installation CLIST: DSNTINST

Severity:
8 (error)

System Action:
The CLIST will continue, but will not produce edited jobs. The CLIST resets the incorrect value to 'max'.

User Response:
See message DSNT465I for the CLIST action.

Explanation:
Internal MVS restrictions require that the IRLM subsystem name be different than the procedure name.

This message is issued by the following panel: DSNTIPI

System Action:
The panel is redisplayed and the cursor is placed on the field in error.

User Response:
Change either the SUBSYSTEM NAME or the PROC NAME so these fields are unique with respect to each other.

Explanation:
The value must be numeric.

This message is issued by the following installation CLIST: DSNTINST

Severity:
8 (error)

System Action:
The CLIST will continue, but will not produce edited jobs or parameter data.

User Response:
This CLIST will continue, but will not produce edited jobs. The value of the variable has been set to the value shown in message DSNT465I. You will need to reenter the output parameter and output data set prefix.

Examine the value and reset it if needed.

Explanation:
The variable name is 'varname'. Subsequent messages will describe the reason the value is invalid and the action taken by the CLIST.

If the error is in the CONTROL value, the value was specified when the CLIST was invoked. The value is not valid, and no additional tracing will be done. The permitted values are NONE, LIST, CONLIST, and SYMLIST. Each value produces more CLIST tracing information than those which precede it. If the error is in other values, the value was specified when the CLIST was invoked on the ISPF panels.

This message is issued by the following installation CLIST: DSNTINST

Severity:
8 (error)

System Action:
The CLIST will continue, but will not produce edited jobs or parameter data.

User Response:
Check the subsequent messages. Exit, then invoke the CLIST with a valid value for the variable.

Problem Determination:
If you suspect an error in the process, set CONTROL(CONLIST) and invoke the CLIST in batch, so that the tracing can be sent with the error documentation. The CLIST itself and the parameter member read in should be sent as well.

Explanation:
The SUBSYSTEM NAME must be different than the PROC NAME.

This message is issued by the following panel: DSNTIPI

System Action:
The panel is redisplayed and the cursor is placed on the field in error.

User Response:
Either reduce the minimum value or increase the maximum value for the indicated buffer pool buffer.

Explanation:
Buffer pool maximums must be greater than or equal to the minimum value for the same buffer pool.

This message is issued by the following panel: DSNTIPE

System Action:
The panel is redisplayed and the cursor is placed on the field in error.

User Response:
Either reduce the minimum value or increase the maximum value for the indicated buffer pool buffer.
**DSNT462I** VALUE IS TOO LONG, MAXIMUM IS length CHARACTERS

**Explanation:** The variable named in message DSNT456I must be shorter than its current value. The maximum length allowed is ‘length’.

This message is issued by the following installation CLIST: DSNTINST

**Severity:** 8 (error)

**System Action:** The CLIST will continue, but will not produce edited jobs. The CLIST resets the value to the default value.

**User Response:** See message DSNT465I for the CLIST action.

---

**DSNT463I** DATA SHARING FIELD MUST BE BLANK IN UPDATE MODE.

**Explanation:** This field is not relevant in Update mode and must be blank. This message is issued by panel: DSNTIPA1

**System Action:** The panel is redisplayed and the cursor is placed on the field in error.

**User Response:** Replace the value with a blank.

---

**DSNT464I** VALUES PERMITTED ARE values

**Explanation:** The variable named in message DSNT456I must be one of the ‘values’ listed.

This message is issued by the following installation CLIST: DSNTINST

**Severity:** 8 (error)

**System Action:** The CLIST will continue, but will not produce edited jobs.

**User Response:** See message DSNT465I for the CLIST action.

---

**DSNT465I** VARIABLE varname SET TO value

**Explanation:** The variable, ‘varname’, named in message DSNT456I is in error. Possible reasons for the error are listed in messages: DSNT456I, DSNT458I, DSNT459I, DSNT460I, DSNT462I, DSNT463I, DSNT464I.

This message is issued by the following installation CLIST: DSNTINST

**System Action:** The CLIST will continue, but will not produce edited jobs. The value has been set to the value shown.

**User Response:** Specify the output data again on the primary install panel. You will be able to see and change the value. If this value is not acceptable, change it, noting the limits.

---

**DSNT466I** Output member CANNOT BE DSNTIDVB OR DSNTIDX

**Explanation:** The OUTPUT MEMBER NAME field must not be DSNTIDVB or DSNTIDX. These two members are shipped with DB2 and must not be overwritten.

This message is issued by the following panel: DSNTIPA1

**System Action:** The panel is redisplayed and the cursor is placed on the field in error.

**User Response:** Change the value of the field under the cursor.

---

**Note:** If the member you specify already exists, it will be overwritten.

---

**DSNT467I** OUTPUT MEMBER SHOULD BEGIN WITH DSNTID

**Explanation:** The output parameter member will be placed into prefix.SDSNSAMP. This data set already has a large number of members. To avoid replacing a member that you need, a naming convention with prefix ‘DSNTID’ is strongly suggested. The suffixes ‘VB’ and ‘XA’ are not allowed (see message DSNT466I).

This message is issued by the following installation CLIST: DSNTINST

**Severity:** 4 (warning)

**System Action:** The CLIST will continue.

**User Response:** Specify a different name for the output member.

---

**DSNT468I** ERROR(S) ENCOUNTERED, OUTPUT IS BYPASSED

**Explanation:** An error was detected earlier in this run. Because of the error, data set editing was not performed.

This message is issued by the following installation CLIST: DSNTINST

**Severity:** 8 (error)

**System Action:** The CLIST will continue, but will not produce edited jobs.

**User Response:** Correct the errors noted earlier, and specify the output prefix name again to produce the edited data.

---

**DSNT469I** INPUT PARAMETERS MUST BE READ BEFORE MIGRATION

**Explanation:** The INPUT MEMBER NAME on panel DSNTIPA1 must have a value to allow migration values to be read. This is to permit the new values to be initialized.

This message is issued by the following installation CLIST: DSNTINST

**Severity:** 8 (error)

**System Action:** The CLIST will return to the main install panel, DSNTIPA1.

**User Response:** Specify DSNTIDX as the INPUT MEMBER NAME and specify the current value for the migration member.

---

**DSNT470I** WARNING, ONLY ONE VOLUME WAS SPECIFIED

**Explanation:** Only one volume serial number was specified on the install panel or CLIST invocation. This does not allow adequate recovery or performance unless it is intended to be a single volume test system.

This message is issued by the following installation CLIST: DSNTINST

**Severity:** 4 (warning)

**System Action:** The CLIST will continue.

**User Response:** If this subsystem is intended to be recoverable, more than one volume is needed. Rerun the installation tailoring process, specifying at least one more volume on the
DSNTIPA2 panel. If this is just a single volume test system, be sure that you specify a single copy of the log data sets. The bootstrap data sets are small and not active, so that two are recommended even on a single volume system.

**DSNT471I** BEGINNING PARAMETER INPUT MEMBER inmem

Explanation: The input parameter member, 'inmem', is being read. This data includes values for all of the installation parameters.

This message is issued by the following installation CLIST: DSNTINST

Severity: 0 (successful execution)

System Action: The CLIST will continue.

---

**DSNT472I** WORK FILE DATABASE NAME CANNOT START WITH DSNDB EXCEPT FOR DSNDB07

Explanation: The work file database name cannot start with the characters DSNDB unless the name is DSNDB07.

This message is issued by the following panel: DSNTIPK

System Action: The panel is redisplayed and the cursor is placed on the field in error.

User Response: Change the name so that it does not start with DSNDB.

---

**DSNT473I** BEGINNING CHECK PHASE

Explanation: This message indicates the following:

- The values entered on the panels are being checked.
- Values which use the K or M suffix are being translated to numbers.

This message is issued by the following installation CLIST: DSNTINST

Severity: 0 (successful execution)

System Action: The CLIST will continue.

---

**DSNT474I** READING count, varname, datatype, data sharing scope, minval, maxval, currentval

Explanation: The values are being read from the parameter member. The count, the variable name, the data type, the data sharing scope, the minimum value, the maximum value, and the current value are shown. This message occurs when the CONTROL keyword requests a trace.

This message is issued by the following installation CLIST: DSNTINST

Severity: 0 (successful execution)

System Action: The CLIST will continue.

---

**DSNT475I** CHECK count, varname, type, minval, maxval, currentval

Explanation: This message indicates the following:

- The values read in or entered on the panels are being checked.
- Values which use the K or M suffix are being translated to numbers.

The count, the variable name, the data type, the minimum value, the maximum value, and the current value are shown. This message occurs when the CONTROL keyword requests a trace.

This message is issued by the following installation CLIST: DSNTINST

Severity: 0 (successful execution)

System Action: The CLIST will continue.

---

**DSNT476I** BEGINNING PARAMETER OUTPUT MEMBER outmem

Explanation: The output parameter member named 'outmem' is being written. This data includes values for all the install parameters.

This message is issued by the following installation CLIST: DSNTINST

Severity: 0 (successful execution)

System Action: The CLIST will continue.

---

**DSNT477I** OUTPUT count, varname, type, minval, maxval, currentval

Explanation: The values entered on the panels are being written to the output parameter member. The count, the variable name, the data type, the minimum value, the maximum value, and the current value are shown. This message occurs when the CONTROL keyword requests a trace.

This message is issued by the following installation CLIST: DSNTINST

Severity: 0 (successful execution)

System Action: The CLIST will continue.

---

**DSNT478I** BEGINNING EDITED DATA SET OUTPUT

Explanation: The output jobs and data are being edited to tailor them. Edited JCL output was requested and no severe errors were encountered.

This message is issued by the following installation CLIST: DSNTINST

Severity: 0 (successful execution)

System Action: The CLIST will continue.

---

**DSNT479I** THE IRLM GROUP NAME AND DB2 GROUP NAME MUST BE DIFFERENT

Explanation: You entered an IRLM group name on panel DSNTIPJ that is the same as the DB2 group name entered on panel DSNTIPK. The names must be different.

This message is issued by the following panel: DSNTIPK

System Action: The panel is redisplayed and the cursor is placed on the field in error.

User Response: Either change the DB2 group name entered on panel DSNTIPK or the IRLM group name on panel DSNTIPJ.
DSNT480I  NAME MUST BE 1-16 CHARs, BEGIN WITH A-Z, AND NOT INCLUDE #$@ OR $.

Explanation: The location name specified on panel DSNTIPR is invalid. The location name must be 1-16 alphanumeric characters, excluding the alphabetic extenders #, @, or $, and must begin with a letter.

This message is issued by panel: DSNTIPR

System Action: The panel is redisplayed and the cursor is placed on the field in error.

User Response: Change the location name to meet the allowable criteria.

---

DSNT481I  DSNTINST data set DATA SET SIZE MAY BE TOO SMALL

Explanation: The DSNTINST CLIST encountered an arithmetic overflow during calculation of this data set's size.

System Action: DSNTINST continues processing and uses 2147483647 for the result of the calculation that caused the overflow. Thus, the size of the data set might be too small.

User Response: Check the data set size in installation job DSNTIJIN. If it is too small, increase it.

---

DSNT482I  TOO MANY CONCURRENTLY ALLOCATED DATA SETS, opnds

Explanation: The number (opnds) calculated for the number of concurrent databases, tables per database, and table spaces per database, is too large. The maximum number of data sets that can be allocated to an MVS address space is 32 767. However, note that 10 000 is the maximum for releases prior to OS/390 Version 2 Release 6 and that virtual 32 767. However, note that 10 000 is the maximum for DB2 Messages

User Response: Change the group name to meet the allowable criteria.

---

DSNT485I type SIZE = size K

Explanation: This is the estimated main storage size for part of the DB2 database address space. This is the most constrained address space. The ‘type’ can be BUFFER POOL, SORT POOL SIZE, RID POOL SIZE, EDMPOOL storage, DATA SET STORAGE, CODE STORAGE, or WORKING STORAGE.

The storage for buffer pools, sort pools, rid pools, EDMPOOL, and code is above the 16MB line. Most of the main storage for data set control blocks is below the 16MB line and is included in the region size. Working storage includes storage above and below the 16MB line, but storage above the line is not included in the region. Refer to Section 2 of DB2 Installation Guide for more information regarding this calculation.

This message is issued by the following installation CLIST: DSNTINST

Severity: 0 (successful execution)

System Action: The CLIST continues.

---

DSNT486I TOTAL MAIN STORAGE = totregion K

Explanation: This is the estimated total region size. It includes storage above the 16MB line. Refer to Section 2 of DB2 Installation Guide for more details regarding this calculation.

This message is issued by the following installation CLIST: DSNTINST

Severity: 0 (successful execution)

System Action: The CLIST continues.

---

DSNT487I TOTAL STORAGE BELOW 16MB = region K (ASSUMING SWA IS ABOVE THE LINE)

Explanation: This message provides an estimate of the virtual storage required below the 16MB line to check for virtual storage constraints. This calculation presumes that you have moved the SWA for DB2 above the 16MB line. Refer to Section 2 of DB2 Installation Guide for details regarding this calculation.

This message is issued by the following installation CLIST: DSNTINST

Severity: 0 (successful execution)

System Action: The CLIST continues.
**User Response:** Check for virtual storage constraints. Your MVS should permit at least this amount of virtual storage below the 16MB line.

**DSNT488I VOLUME voln WILL REQUIRE AT LEAST nn 4K BLOCKS**

**Explanation:** This message states the number of 4KB blocks of space that will be required for the specified volume in order to install or migrate the current release of DB2.

Volume ‘voln’ is specified in the VOLUME SERIAL fields on install panel DSNTIPA2, or with the VOLSDATn input parameters to the Install CLIST. The message indicates how much space will be needed on the selected volume to install or migrate this release of DB2.

This message is issued by the following installation CLIST: DSNTINST

**Severity:** 0 (successful execution)

**System Action:** Processing continues.

**User Response:** Ensure that the volume has at least as much available storage as the message indicates it should have. If it does not, rerun the INSTALL CLIST specifying different volumes, or create more available space on the originally specified volume.

In order to convert the number of 4KB blocks required to the number of cylinders required, use the table below. Divide the number of 4KB blocks (in the DSNT488I message) by the number of 4KB blocks per cylinder (in the table) to get the number of cylinders required.

<table>
<thead>
<tr>
<th>Device Type</th>
<th>4KB Blocks per Cylinder</th>
<th>4KB Blocks per Track</th>
</tr>
</thead>
<tbody>
<tr>
<td>3330</td>
<td>57</td>
<td>3</td>
</tr>
<tr>
<td>3340</td>
<td>24</td>
<td>2</td>
</tr>
<tr>
<td>3350</td>
<td>120</td>
<td>4</td>
</tr>
<tr>
<td>3375</td>
<td>96</td>
<td>8</td>
</tr>
<tr>
<td>3380</td>
<td>150</td>
<td>10</td>
</tr>
</tbody>
</table>

These size estimates are for system data only. They do not include: user data, archive logs, image copies, or temporary work data sets other than the temporary database.

**DSNT489I CLIST EDITING dsname(member), explanation**

**Explanation:** The CLIST is editing the data set and member dsname(member). The explanation is the type of data being edited and has one of these values:

- INSTALL JCL
  Jobs that are edited and run as directed during the installation process.
- MIGRATE JCL
  Jobs that are edited and run as directed only during the migration process.
- FALL BACK JCL
  A job that is only run as directed when falling back to the previous release.
- RECOVERY JCL
  A job that is only run as directed during a recovery process. It deletes the DB2 data sets.
- SAMPLE JCL
  Jobs that are edited and run during installation verification to add the sample application.

**SAMPLE DATA**

Edited data that installation verification jobs require.

**CLIST**

Customized CLISTs to reflect your names used during the installation process.

This message is issued by the following installation CLISTs:

- DSNTINST
- DSNTINS1
- DSNTINS2

**Severity:** 0 (successful execution)

**System Action:** The CLIST continues.

**DSNT490I SAMPLE DATA UNLOAD PROGRAM**

**Explanation:** This is the header, indicating a normal start for the application program.

**DSNT491I TOO MANY TABLES ENTERED (MAXIMUM OF 100 TABLES)**

**Explanation:** The number of tables entered for unloading exceeded the maximum of 100 tables. The first 100 tables in the input should have been processed.

**System Action:** The application program is terminated.

**User Response:** Split the run into multiple runs, none with more than 100 tables.

**Problem Determination:** Check the application program input. Make sure there are no more than 100 tables.

**DSNT492I SQL WARNING DURING SQL STATEMENT func, TABLE ttttttt**

**Explanation:** The SQL statement may not be executed correctly. The function ‘func’ may be PREPARE, OPEN, FETCH, or CLOSE, indicating the type of SQL statement encountering the error. Table ‘tttttt’ is the name of the table or view being unloaded.

**System Action:** The request may not be executed correctly.

**User Response:** Refer to "Section 2. SQL Return Codes" on page 17.

**Problem Determination:** Determine which SQL statement in the application program caused the warning and see if it is reproducible. Follow the diagnosis approach suggested for the warning.

**DSNT493I SQL ERROR DURING SQL STATEMENT func, TABLE ttttttt**

**Explanation:** The SQL statement may not be executed correctly. The function ‘func’ may be PREPARE, OPEN, FETCH, or CLOSE, indicating the type of SQL statement encountering the error. Table ttttttt is the name of the table or view being unloaded.

**System Action:** The request was not executed correctly.

**User Response:** Refer to "Section 2. SQL Return Codes" on page 17.

**Problem Determination:** Determine which SQL statement in the application program caused the error and see if it is reproducible. Follow the diagnosis approach suggested for the SQL return code.
Problem Determination: There is an error in the unload program. When reporting this problem, have the application program listing and its JCL available.

**DSNT500I**  csect-name RESOURCE UNAVAILABLE

Reason: The requested function requires a resource that is currently unavailable. In conjunction with other messages this message will identify the system action and the action that should be taken by the installation or operator.

'type' and 'name' identify the resource that is currently unavailable. The type code identifies the type, format, and content of the resource named.

Operator Response: Note the reason code, the type code, and the name. See the Problem Determination section for an explanation of the collected data.

**Problem Determination:** The reason the resource is unavailable is identified by a reason code. The reason codes that appear in this message are described in "Section 4. DB2 Codes" on page 577. Use Table 3 in Appendix B, "Problem determination" on page 1051, to find the type of resource identified in the message.

If type is X'D001' or X'D01', the table name can be determined by using the following SQL statement:

```
SELECT CREATOR, NAME
FROM SYSIBM.SYSTABLES
WHERE DBID = dbid AND OBID = obid;
```

However, if the failing table has been dropped, then the above SELECT fails or possibly might return an incorrect name.

Collect the following diagnostic item listed in Appendix B, "Problem determination" on page 1051.

**DSNT501I**  csect-name RESOURCE UNAVAILABLE

| CORRELATION-ID | = id1 |
| CONNECTION-ID | = id2 |
| LUW-ID | = id3 |
| REASON | = reason |
| TYPE | = type |
| NAME | = name |
**DSNT502I** • **DSNT507I**

**Explanation:** The requested function requires a resource that is currently unavailable. This message is issued with other messages that identify the system action and the action the installer or operator should take.

DB2 can recover from a resource not available in some cases and can complete successfully. One example is during setup of a performance enhancement during bind time for execution time. If DB2 recovers successfully, then no action is necessary.

For type=905, reason=00C90092, and name=IRLM, message DSNT501I is usually issued once. It is suppressed at the DB2 subsystem level until the IRLM out-of-storage condition is relieved.

**Problem Determination:**

- **Type:** The type of resource that is currently unavailable.
- **Reason:** The reason code that tells why the resource is unavailable.
- **Name:** The name of the resource that is currently unavailable.
- **Operator Response:** Note the ‘reason’ code, the ‘type’ code, and the ‘name’.
- **Problem Determination:** A type X’401’ indicates that a cascading revoke of SYSADM or SYSCTRL in a lower-level release attempted to revoke privileges or grants on objects that are available only in a higher-level release. Because the cascading revoke affects objects that are unknown to the lower-level release, you can only revoke SYSADM or SYSCTRL from the higher-lever release.

Collect the following diagnostic item listed in Appendix B, “Problem determination” on page 1051.

**DSNT502I** • **ERROR IN DSNTIAUL SQL INPUT:** statement

**Explanation:** The DSNTIAUL SQL statement could not be prepared.

**System Action:** The application program terminates.

**User Response:** Notify the system programmer.

**System Programmer Response:** Check that the DSNTIAUL input statement is a complete SQL statement, ending with a semicolon.

**DSNT503I** • **UNLOAD DATA SET ddname RECORD LENGTH SET TO nnnnn.**

**Explanation:** If the ddname is SYSRECCnn, the record length specified in the JCL for the data set is not large enough to contain an entire row of unloaded data, or the record length was not specified in the JCL.

If the ddname is SYSPUNCH, the record length specified in the JCL is not between 80 and 255, or the record length was not specified in the JCL.

**System Action:** DB2 sets the record length of the unload data set to the value specified in the message text.

**DSNT504I** • **UNLOAD DATA SET ddname BLOCKSIZE SET TO nnnnn.**

**Explanation:** The block size for the SYSRECCnn or SYSPUNCH data set was one of the following:

- Not specified in the JCL
- Set to zero in the JCL
- Less than the required record length
- Not an even multiple of the required record length

**System Action:** DB2 sets the block size of the unload data set to the value specified in the message text.

**DSNT505I** • **DSNTIAUL OPTIONS USED: ’nnn’.**

**Explanation:** You specified these options when you invoked DSNTIAUL. ‘SQL’ is the only valid option.

**Severity:** 0 (informational)

**DSNT506I** • **INPUT STATEMENT WAS NOT SELECT * FROM A SINGLE TABLE. LOAD STATEMENT WILL NEED MODIFICATION.**

**Explanation:** The SELECT statement used to request a table unload contained one of the following:

- A SELECT clause other than “SELECT * FROM”
- A FROM clause that does not contain exactly one table name

The table to be loaded is therefore not the same as the table from which the data is unloaded. DSNTIAUL is unable to determine the table name and all column names for the table to be loaded.

**Severity:** 4 (warning)

**System Action:** DSNTIAUL generates a LOAD statement containing the string ‘TBLNAME’ for the table name. Some column names may be blank.

**User Response:** Change the LOAD statement table name to the name of a table with the indicated column descriptions.

**DSNT507I** • **cssect-name RECORD LENGTH NEEDED IS GREATER THAN MAXIMUM ALLOWED FOR TABLE table-name**

**Explanation:** In order to unload table table-name, DB2 needs an output data set with a record length greater than the system maximum of 32760 bytes. This occurs when the table to be unloaded is in a 32KB page table space and contains a combination of long columns and a number of date, time, or timestamp columns.

**Severity:** 4 (warning)

**System Action:** DSNTIAUL generates a LOAD statement containing the string ‘TBLNAME’ for the table name. Some column names may be blank.

**User Response:** Change the LOAD statement table name to the name of a table with the indicated column descriptions.
Severity: 8 (error)
System Action: The application program is terminated.

DSNT508I WARNING - NONSTANDARD JOB CARD 
(cardstat), NO JOB CARDS WILL BE ADDED
TO THE EDITED JOBS
Explanation: The job card you entered in field 3 of panel DSNTIPY
contains one or more of the following errors:
- Less than 7 characters ('cardstat' = TOO SHORT)
- *//" missing as the first 2 characters ('cardstat' = 
MISSING //)
- Missing the word "JOB" ('cardstat' = MISSING 
"JOB"TOKEN)
This message is issued by the following installation CLIST: 
DSNTINST

System Action: The message is written to the screen, after 
all panels are displayed and before any job editing. No JCL is 
added to the edited jobs.
User Response: You can continue with job editing and man-
ually add JCL to the edited jobs. Alternatively, you can repeat 
the installation process and make corrections to the job card 
entered on panel DSNTIPY.

DSNT509I WARNING - MIGRATION INPUT MEMBER 
LEVEL IS rel_ind. LEVEL prev_rel IS REQUIRED. RETURN TO PANEL DSNTIPA1
TO CHANGE MIGRATION INPUT MEMBER
Explanation: The migration input member you entered on 
panel DSNTIPA1 contains incorrect release indicator 'rel_ind'. 
It should contain the indicator for the prior release ('prev_rel'). 
If your input member does not contain a release indicator, 
'rel_ind' will be <null>. This probably indicates that you are 
using a down-level member.
This message is issued by the following installation CLIST: 
DSNTINST

System Action: The message is written to the screen, after 
display of panel DSNTIPA1.
User Response: Press ENTER to proceed to the next panel, 
and then PF3 to return to panel DSNTIPA1 in order to enter an 
input member with the correct release indicator.

DSNT510I WARNING - INPUT MEMBER inmem LEVEL IS 
rel_ind. LEVEL curr_rel IS REQUIRED. 
RETURN TO PANEL DSNTIPA1 TO CHANGE INPUT MEMBER
Explanation: The input member 'inmem' you entered in field 
6 on panel DSNTIPA1 contains incorrect release indicator 
'rel_ind'. It should contain the indicator for the current release 
('curr_rel'). If your input member does not contain a release 
indicator, 'rel_ind' will be <null>. This probably indicates that 
you are using a down-level member.
This message is issued by the following installation CLIST: 
DSNTINST

System Action: The message is written to the screen, after 
display of panel DSNTIPA1.

User Response: Enter unique names in these fields for each 
user response.

DB2 Messages 357
**DSNT515I**  
**FIELD 7 MUST BE UNIQUE FOR EACH NEW MEMBER INSTALLED**  
Explanation: This warning message is issued to remind you that the MEMBER IDENTIFIER field on panel DSNTIPJ or the DSNZPARM NAME field on panel DSNTIPO must be unique for each new member installed within a DB2 data sharing group. The installation process does not check for uniqueness of these values within a group.  
This message is issued by the following panels: DSNTIPJ and DSNTIPO  
User Response: Enter unique values in these fields for each member of a DB2 data sharing group.

**DSNT516I**  
**FIELDS 1, 2, AND 4 MUST BE UNIQUE FOR EACH NEW MEMBER INSTALLED**  
Explanation: This warning message is issued to remind you that the SUBSYSTEM NAME, COMMAND PREFIX, and SUBSYSTEM SEQUENCE fields must be unique for each new member installed within a DB2 data sharing group. The installation process does not check for uniqueness of these values within a group.  
This message is issued by the following panel: DSNTIPM  
User Response: Enter unique values in these fields for each member of a DB2 data sharing group.

**DSNT517I**  
**CHARACTERS 2-18 MUST BE A-Z, 0-9, #, @, $, OR UNDERSCORE**  
Explanation: WLM environment names that do not meet the following criteria are not allowed. A WLM environment name may contain up to eighteen characters. The first character of a WLM environment name must either be an alphabetic character (A-Z) or a standard alphabetic extender (in the United States, the standard alphabetic extenders are '#' and '@').  
For characters two through eighteen, a character may be an alphabetic character (A-Z), an alphabetic extender ('#', '@', '$'), a numeric character (0-9), or the underscore character ('_').  
This message is issued by panel: DSNTIPX  
System Action: The panel is redisplayed, and the cursor is placed on the field with the error.  
User Response: Change the WLM environment name to meet the criteria described above.

**DSNT518I**  
**THE VALUES FOR DRDA PORT AND RESYNC PORT CANNOT BE THE SAME**  
Explanation: You entered the same value for DRDA PORT and RESYNC PORT. The values for these fields must be different.  
This message is issued by the following panel: DSNTIP5  
System Action: The panel is redisplayed and the cursor is placed on the field in error.  
User Response: Change either the DRDA PORT or the RESYNC PORT value so that they are different.

**DSNT519I**  
**IF YOU SPECIFY EITHER DRDA OR RESYNC PORT, BOTH MUST BE SPECIFIED**  
Explanation: You entered a value for either DRDA PORT or RESYNC PORT, but not the other. If either DRDA PORT or RESYNC PORT is specified, both must be specified.  
This message is issued by the following panel: DSNTIP5  
System Action: The panel is redisplayed and the cursor is placed on the field in error.  
User Response: Either enter a value for the null field, or blank out both DRDA PORT and RESYNC PORT.

**DSNT522I**  
**csect-name REQUIRED TCP/IP SUPPORT NOT AVAILABLE**  
Explanation: The DB2 BSDS indicated that TCP/IP access was required, but the required TCP/IP interfaces were not available on this system. The required TCP/IP interfaces are provided by OS/390 Release 3.  
System Action: DDF startup terminates abnormally.  
System Programmer Response: Take one of the following actions:  
- Install OS/390 Release 3 or later, so that the required TCP/IP interfaces are available.  
- Use the change log inventory utility (DSNJU003) to deactivate DB2's TCP/IP support, by specifying PORT=0 and REPORT=0 on the DDF statement.

**DSNT601I**  
**THE DESCRIPTOR FOR type name DOES NOT EXIST IN DBD01**  
Explanation: This message is issued for multiple-line WTO. The database, table space, or index space 'name' is in the DB2 catalog but a descriptor for the object does not exist in the DBD01 table space of database DSNDDB01. This error can be produced when one of the following is true:  
- The Version 6 catalog has been migrated into Version 5. There is an object in the Version 5 catalog but there is not a descriptor for the object in the Version 5 directory (DBD01).  
- The user did not completely restore the DBD01 table space during a recovery process.  
- There is a DB2 logic error.  
In the message, 'type' is either 'DATABASE' or 'SPACE' and 'name' is the eight character name of the database, table space, or index space.  
System Action: The process continues normally.  
System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**DSNT602I**  
**NO SPACES FOUND**  
Explanation: This message is issued for multiple line WTO. It is produced when a DISPLAY DB(name) SPACENAM(...) is entered and no spaces were found to satisfy the request. SPACENAM(...) might have been entered as a range, a subset, or a list of spaces.
**DSNT603I** spacetype name NOT type

**Explanation:** This message is issued for multiple-line WTO. It is produced when no table space or index space listed in the DISPLAY DB(...) SPACENAM(...) satisfies your request.

- **spacetype**
  - TABLESPACE if the space is a table space or INDEXSPACE if the space is an index space.
- **name**
  - The name of the space.
- **type**
  - A character string that indicates the type of request specified. The string is a list of the following, delimited by ‘OR’:
    - ‘ACTIVE’ if the keyword ACTIVE is specified
    - ‘RESTRICTED’ if the keyword RESTRICT is specified.

**System Action:** Message DSNT301I or DSNT302I is produced if no object is found and the keywords ACTIVE and RESTRICT are omitted.

**DSNT604I** NO INFORMATION AVAILABLE

**Explanation:** This message is issued for multiple-line WTO. It is produced when there is no LOCK or USE information available. When DISPLAY DB(name) SPACENAM(...) is entered, and SPACENAM(...) is a list of spaces, this message indicates that no table spaces or index spaces whose names are listed have LOCK or USE information available. If DISPLAY DB(name) SPACENAM(...) is entered, and SPACENAM(...) is a range or a subset of spaces, no table spaces and index spaces within the specified database have LOCK or USE information available. This message is produced only when the keywords USE and LOCKS are specified.

**DSNT605I** DATABASE name CANNOT BE STOPPED. IT CONTAINS THE DDL REGISTRATION TABLES

**Explanation:** The database specified in the message cannot be stopped because it contains the application and object registration tables. Install SYSADM or install SYSOPR authority is needed to stop the database.

**System Action:** The database specified in the message is not stopped.

**User Response:** Reissue the command with the proper authority.

**DSNT606I** TABLESPACE name CANNOT BE STOPPED. IT CONTAINS A DDL REGISTRATION TABLE

**Explanation:** The table space specified in the message cannot be stopped because it contains an application or object registration table. Install SYSADM or install SYSOPR authority is needed to stop the table space.

**System Action:** The table space specified in the message is not stopped.

**User Response:** Reissue the command with the proper authority.

**DSNT603I** INDEXSPACE name CANNOT BE STOPPED. IT IS DEFINED ON A DDL REGISTRATION TABLE

**Explanation:** The index space specified in the message cannot be stopped because it is defined on an application or object registration table. Install SYSADM or install SYSOPR authority is needed to stop the index space.

**System Action:** The index space specified in the message is not stopped.

**User Response:** Reissue the command with the proper authority.

**DSNT700I** table-name IS THE ACTIVE RESOURCE LIMIT SPECIFICATION TABLE

**Explanation:** This is a response message to the DISPLAY RLIMIT command. The resource limit facility (governor) is currently active and is using table ‘table-name’ to determine resource limits.

**System Action:** The system continues normal processing.

**User Response:** See Operator Response.

**Operator Response:** To have the governor active while utilizing a different resource limit specification table, issue the START RLIMIT command specifying the ID of the desired table. If you do not want the facility to be active, issue the STOP RLIMIT command.

**System Programmer Response:** May be used to resolve questions about what table is being used.

**DSNT701I** RESOURCE LIMIT FACILITY IS INACTIVE

**Explanation:** This is a response message to the DISPLAY RLIMIT command. It results whenever the governor is not active.

**System Action:** Normal processing continues.

**User Response:** See Operator Response.

**Operator Response:** If you want to activate the governor, specify the ID of the resource limit specification table to be used and issue the START RLIMIT command.

**System Programmer Response:** If the facility is already active (that is, a DSNT703 message was previously received), verify that the DSNT703 message appeared before the DISPLAY RLIMIT command was entered. If uncertain, reissue the DISPLAY RLIMIT command. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051, 1, 5.

**DSNT702I** RESOURCE LIMIT FACILITY HAS BEEN STOPPED. WAS USING table-name

**Explanation:** This message is the normal response for a STOP RLIMIT command. Table ‘table-name’ was being used to determine resource limits.

**System Action:** The governor is stopped.

**System Programmer Response:** May be used to resolve questions about what table was being used.
Table-name HAS BEEN STARTED FOR THE RESOURCE LIMIT FACILITY

Explanation: This message is the normal response for a START RLIMIT command. Table 'table-name' is currently being used to determine resource limits.

System Action: The governor has started utilizing the specified table.

System Programmer Response: May be used to resolve questions about what table is being used.

Table-name DOES NOT EXIST. START LIMIT COMMAND FAILED

Explanation: The START RLIMIT command has been entered but failed because table 'table-name' does not exist.

System Action: The START RLIMIT command is ignored.

User Response: See Operator Response.

Operator Response: Verify that the 1 or 2 characters following DSNRLST are what was intended to be entered as the ID on the START RLIMIT command. If not, reenter the command specifying the proper ID. If the ID appears correct, contact the system programmer.

System Programmer Response: DB2 was unable to find the specified table in the catalog. Verify that the FULLY QUALIFIED name is the one expected. The table name is built by appending the 1 or 2 character ID specified on the START RLIMIT command to the authorization ID DSNRLST. The authorization ID is determined from the DSNZPARMs used when starting the subsystem.

If everything appears to be in order, from a TSO terminal with the proper authorization, enter the following SQL statement:

```
SELECT * FROM SYSIBM.SYSTABLES WHERE NAME=DSNRLSTxx AND CREATOR=authorization ID
```

Problem Determination: Collect the console output showing the failing START command.

Table-name starting with the DSNRLST authorization ID Table-name up to but not including the period.

If an entry is found, save the output and if you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items:

- Console output showing the failing START command
- The output of the SELECT command.

START RLIMIT COMMAND FAILED. COLUMN column-name IN TABLE table-name IS INCORRECTLY DEFINED. THE COLUMN DEFINITION IS attribute WITH LENGTH length AND NULL ATTRIBUTE null-attribute. THE COLUMN DEFINITION SHOULD BE attribute WITH LENGTH length AND NULL ATTRIBUTE null-attribute

Explanation: The START RLIMIT command has been entered but failed because TABLE 'table-name' does not have the proper column definition for a resource limit specification table. The current column definition is given as well as the proper column definition.

System Action: The START RLIMIT command is ignored.

User Response: See Operator Response.

Operator Response: Verify that the 1 or 2 characters following DSNRLST are what was intended to be entered as the ID on the START RLIMIT command. If not, reenter the command specifying the proper ID. If the ID appears to be correct, contact the system programmer.

System Programmer Response: TABLE 'table-name' does not have the proper column definition for a resource limit specification table. Compare the current table column definition to the proper column definition given in the message.

Problem Determination: Collect the console output showing the failing START command.

INDEX index-name DOES NOT EXIST. START RLIMIT COMMAND FAILED

Explanation: The START RLIMIT command has been entered but failed because INDEX DSNARLxx does not exist for the corresponding resource limit specification table, DSNRLSTxx.

System Action: The START RLIMIT command is ignored.

User Response: See Operator Response.

Operator Response: Verify that the 1 or 2 characters following DSNRLST are what was intended to be entered as the ID on the START RLIMIT command. If not, reenter the command specifying the proper ID. If the ID appears to be correct, contact the system programmer.

System Programmer Response: The resource limit specification table DSNRLSTxx does not define the required index DSNARLxx. Create the required index and reissue the START RLIMIT command.

Problem Determination: Collect the console output showing the failing START command.
**DSNT710I**  
**table-name ALREADY ACTIVE. START LIMIT COMMAND IGNORED**

**Explanation:** A START RLIMIT command was entered and the governor is already active utilizing the specified table. The command is ignored.

**System Action:** The governor continues to use table 'table-name'.

**User Response:** See Operator Response.

**Operator Response:** Verify that the ID specified on the START RLIMIT command was the one desired. If not, reenter the command specifying the correct ID. If it is correct, no action is needed since the facility is already active and is using the desired table.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** Collect the console output showing the failing START command.

---

**DSNT711I**  
**COLUMN column-name IS MISSING IN TABLE table-name. SHOULD BE DEFINED AS attribute WITH LENGTH length AND NULL INDICATOR OF null-attribute**

**Explanation:** The START RLIMIT command has been entered but failed because COLUMN 'column-name' in resource limit specification table 'table-name' is not defined. The proper column definition is given in the message.

**System Action:** The START RLIMIT command is ignored.

**User Response:** See Operator Response.

**Operator Response:** Verify that the 1 or 2 characters following DSNRLST are what was intended to be entered as the ID on the START RLIMIT command. If not, reenter the command specifying the proper ID. If the ID appears to be correct, contact the system programmer.

**System Programmer Response:** TABLE 'table-name' does not have COLUMN 'column-name' defined. Use ALTER TABLE to define the column as specified in the message.

**Problem Determination:** Collect the console output showing the failing START command.

---

**DSNT712I**  
**INDEX index-name IS NOT FOR TABLE table-name. START RLIMIT COMMAND FAILED**

**Explanation:** The START RLIMIT command has been entered but failed because INDEX 'index-name' is not defined for resource limit specification table 'table-name'.

**System Action:** The START RLIMIT command is ignored.

**User Response:** See Operator Response.

**Operator Response:** Verify that the 1 or 2 characters following DSNRLST are what was intended to be entered as the ID on the START RLIMIT command. If not, reenter the command specifying the proper ID. If the ID appears to be correct, contact the system programmer.

**System Programmer Response:** INDEX 'index-name' is not defined in resource limit specification table 'table-name'. resource limit specification table DSNRLSTxx does not define the required index DSNARLxx. The last two characters of the table name correspond to the last two characters of the index. Drop the existing DSNARLxx index and create the correct index in the resource limit specification Table.

**Problem Determination:** Collect the console output showing the failing START command.

---

**DSNT713I**  
**INDEX index-name IS NOT UNIQUE. START RLIMIT COMMAND FAILED**

**Explanation:** The START RLIMIT command has been entered but failed because INDEX 'index-name' in the resource limit specification table is not defined as a UNIQUE index.

**System Action:** The START RLIMIT command is ignored.

**User Response:** See Operator Response.

**Operator Response:** Verify that the 1 or 2 characters following DSNRLST are what was intended to be entered as the ID on the START RLIMIT command. If not, reenter the command specifying the proper ID. If the ID appears to be correct, contact the system programmer.

**System Programmer Response:** INDEX 'index-name' in resource limit specification table is not UNIQUE. Redefine it as unique.

**Problem Determination:** Collect the console output showing the failing START command.

---

**DSNT714I**  
**INDEX index-name IS INCORRECTLY DEFINED. START RLIMIT COMMAND FAILED**

**Explanation:** The START RLIMIT command has been entered but failed because INDEX 'index-name' in resource limit specification table 'table-name' is not properly defined.

**System Action:** The START RLIMIT command is ignored.

**User Response:** Contact the system programmer.

**Operator Response:** Contact the system programmer.

**System Programmer Response:** INDEX 'index-name' in the resource limit specification table does not have the proper definition. Refer to Section 5 (Volume 2) of *DB2 Administration Guide* for an example to define the resource limit specification table.

**Problem Determination:** Collect the console output showing the failing START command.
**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

**DSNT717I csect-name TABLE SPACE name CANNOT BE STOPPED. IT CONTAINS AN ACTIVE RESOURCE LIMIT SPECIFICATION TABLE**

**Explanation:** Table space name cannot be stopped because it contains an active resource limit specification table.

**System Action:** The table space is not stopped.

**Operator Response:** If the table space must be stopped, either stop the resource limit facility (STOP RLIMIT) or switch it to use a resource limit specification table that is not in the table space (START RLIMIT,ID=xx). In a DB2 data sharing environment, you must either stop the resource limit facility on all members of the DB2 data sharing group or switch it to use a resource limit specification table that is not in the table space.

**DSNT716E AN ERROR OCCURRED ESTABLISHING A RESOURCE LIMIT FOR CORRELATION-ID correlation-id, CONNECTION-ID connection-id, LUW-ID luw-id =token. LIMIT WILL BE USED AS THE LIMIT**

**Explanation:** An internal error occurred while the resource limit for the specified requester was being established. The 'limit' is determined from the default specified in the system parameters. This default can be:

- NOLIMIT: No limit applies.
- NORUN: Zero time limit.
- integer: The limit to be used.

The reason code that defines the read error is included in the message text, as are the 'connection-ID', 'correlation-ID', and the logical-unit-of-work identifier (LUW-ID) of the thread.

An LUW-ID of an '*' indicates that the thread does not have a LUW-ID. If the LUW-ID is not an '*', the value is a logical-unit-of-work-id that is assigned to the thread followed by an '=' sign and a token value, which can be used in place of logical-unit-of-work-id in any DB2 command that accepts logical-unit-of-work-id as input. Correlation IDs beginning with '"nn"', where 'nn' is a number from 01 to 28, identify system agents.

**System Action:** Processing continues using the system-defined default.

**Operator Response:** Notify the system programmer.

---

**DSNT718I csect-name INDEX SPACE name CANNOT BE STOPPED. IT IS DEFINED ON AN ACTIVE RESOURCE LIMIT SPECIFICATION TABLE**

**Explanation:** Index space name cannot be stopped because it contains an index on an active resource limit specification table.

**System Action:** The index space is not stopped.

**Operator Response:** If the index space must be stopped, either stop the resource limit facility (STOP RLIMIT), or switch it to use a different resource limit specification table that does not have an index in the index space (START RLIMIT,ID=xx). In a DB2 data sharing environment, you must either stop the resource limit facility on all members of the DB2 data sharing group or switch it to use a different resource limit specification table that does not have an index in the index space.

---

**DSNT719I TABLE table-name CANNOT BE READ. START RLIMIT COMMAND FAILED**

**Explanation:** TABLE 'table-name' cannot be accessed. This message may be preceded by related error messages that explain why the table cannot be accessed.

**System Action:** The START RLIMIT command failed.

**User Response:** See Operator Response.

**Operator Response:** TABLE 'table-name' cannot currently be accessed for reading. In the case of a deadlock or timeout, reissue the START RLIMIT command.

---

**DSNT720I csect-name INDEX index-name NEEDS TO BE index-type**

**Explanation:** The START RLIMIT command was entered but failed because the named index defined for the resource limit specification table is not defined properly.

**System Action:** The system ignores the START RLIMIT command.

**User Response:** Contact the system programmer.

**Operator Response:** Contact the system programmer.
System Programmer Response: The named index defined on the resource limit specification table does not have the proper definition.

Problem Determination: Collect the console output showing the failing START command.

**DSNT721I**

**csect-name** DATABASE *name* CANNOT BE STARTED WITH ACCESS (UT). IT CONTAINS AN ACTIVE RESOURCE LIMIT SPECIFICATION TABLE

Explanation: Database *name* cannot be started with access (UT) because it contains an active resource limit specification table.

System Action: The START DATABASE command is ignored.

Operator Response: If the database must be started with access (UT), either stop the resource limit facility (STOP RLIMIT), or switch it to use a resource limit specification table that is not in the database (START RLIMIT,ID=xx). In a DB2 data sharing environment, you must either stop the resource limit facility on all members of the DB2 data sharing group or switch it to use a resource limit specification table that is not in the database.

**DSNT722I**

**csect-name** TABLE SPACE *name* CANNOT BE STARTED WITH ACCESS (UT). IT CONTAINS AN ACTIVE RESOURCE LIMIT SPECIFICATION TABLE

Explanation: Table space *name* cannot be started with access (UT) because it contains an active resource limit specification table.

System Action: The START DATABASE command is ignored.

Operator Response: If the table space must be started with access (UT), either stop the resource limit facility (STOP RLIMIT), or switch it to use a resource limit specification table that is not in the table space (START RLIMIT,ID=xx). In a DB2 data sharing environment, you must either stop the resource limit facility on all members of the DB2 data sharing group or switch it to use a resource limit specification table that is not in the table space.

**DSNT723I**

**csect-name** INDEX SPACE *name* CANNOT BE STARTED WITH ACCESS (UT). IT IS DEFINED ON AN ACTIVE RESOURCE LIMIT SPECIFICATION TABLE

Explanation: Index space *name* cannot be started with access (UT) because it contains an index on an active resource limit specification table.

System Action: The START DATABASE command is ignored.

Operator Response: If the index space must be started with access (UT), either stop the resource limit facility (STOP RLIMIT), or switch it to use a different resource limit specification table that does not have an index in the index space (START RLIMIT,ID=xx). In a DB2 data sharing environment, you must either stop the resource limit facility on all members of the DB2 data sharing group or switch it to use a resource limit specification table that does not have an index in the index space.

**DSNT724E**

**csect-name** ERROR reason-code IN READING RESOURCE LIMIT SPECIFICATION TABLE table-name. FOR AUTHORIZATION ID auth-id RUNNING THREAD WITH CORRELATION ID correlation-id, CONNECTION ID connection-id, AND LUWID luw-id, USE OF operation-name IS NOT GOVERNED.

Explanation: An error occurred reading resource limit specification table 'table-name'. 'Auth-id' is assumed to be allowed to perform 'operation-name'. 'Operation-name' is BIND or PARALLEL PROCESSING.

The reason code defining the read error is included in the message text as well as the connection ID, correlation ID, and logical unit of work (LUW) ID of the thread. An LUW-ID '***' indicates that the request originated at this site. If not an '***', the LUW-ID is assigned to the allied thread at the requesting site. Correlation IDs beginning with '0nn', where 'nn' is a number from 01 to 28, identify system agents.

System Action: If the 'operation-name' is BIND, processing continues if the 'auth-id' is authorized to perform the BIND. If the 'operation-name' is PARALLEL PROCESSING, query parallelism is not disabled and can be used if the value of the CURRENT DEGREE special register is 'ANY'.

User Response: Notify the system programmer.

**System Programmer Response:** Investigate the problem indicated by the reason code and preceding messages. If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Operator Response: Notify the system programmer.

Problem Determination: Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 2, 5.

**DSNT725E**

AN ERROR OCCURRED WHILE GOVERNING BIND OPERATIONS OF auth-id RUNNING WITH CORRELATION-ID correlation-id, CONNECTION-ID connection-id, LUW-ID luw-id. auth-id IS ALLOWED TO PERFORM BIND OPERATIONS

Explanation: An internal error occurred while determining whether or not 'auth-id' is allowed to perform bind operations. It is assumed that 'auth-id' is allowed to perform bind operations.

An LUW-ID '***' indicates that the request originated at this site. If not an '***', the LUW-ID is assigned to the allied thread at the requesting site. Correlation IDs beginning with '0nn' where 'nn' is a number from 01 to 28, identify system agents.

This message is issued by the following module: DSNTCAUT

System Action: Processing occurs assuming the authorization ID is allowed to perform bind operations.

User Response: Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Operator Response: Notify the system programmer.

Problem Determination: Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 2, 5.
DSNT726I  csect-name DATABASE name AND ANY SPACE IT CONTAINS CANNOT BE STARTED WITH ACCESS (UT). IT IS THE ACTIVE COMMUNICATIONS DATABASE

Explanation: The database specified in the message cannot be started with access (UT) because it is the active communications database. In addition, spaces within the active communications database cannot be started with access (UT).

System Action: The START DATABASE command is ignored.

Operator Response: If the database or any space within it must be started with access (UT), you must stop the distributed data facility (STOP DDF). In a DB2 data sharing environment, you must stop the distributed data facility on all members of the DB2 data sharing group.

DSNT735I  object name CANNOT BE STARTED. IT CONTAINS OR IS DEFINED ON THE DDL REGISTRATION TABLE(S)

Explanation: The object specified in the message cannot be started because it contains or is defined on the DDL registration table(s). Install SYSADM or install SYSOPR authority is needed to start the object.

In the message, ‘object’ is either:
- DATABASE if the specified database contains the application and object registration tables
- TABLESPACE if the specified table space contains an application or object registration table
- INDEXSPACE if the specified index space is defined on an application or object registration table

System Action: The object specified in the message is not started.

User Response: Reissue the command with the proper authority.

DSNT736I  csect-name ASYNCHRONOUS STOP DATABASE COMMAND HAS COMPLETED FOR COMMAND command_string

Explanation: Asynchronous processing for the STOP DATABASE command completed for the command whose syntax is shown in the message.

command_string is the STOP DATABASE command string for the command that is completed. The string always uses the abbreviation DB for DATABASE and SPACE for SPACENAM to save characters.

Only the first 100 characters of the STOP DATABASE command are displayed.

System Action: Asynchronous processing for the STOP DATABASE command is complete.

System Programmer Response: No action is required.

DSNT801I  csect-name DB2 CANNOT IDENTIFY TO IRLM. IRLM CANNOT CONNECT TO ITS DATA SHARING GROUP. THE LOCK STRUCTURE THAT IRLM ATTEMPTED TO ACCESS WAS strname.

Explanation: IRLM failed to connect to the IRLM data sharing group. This message accompanies abend reason code 00E30806.

System Action: DB2 terminates abnormally with reason code 00E30806.

System Programmer Response: Some possible reasons why IRLM could not connect to its data sharing group are:
- The lock structure is not properly defined in the active MVS CFRM administrative policy. The lock structure name is a concatenation of the DB2 data sharing group name and the string 'LOCK1' separated by an underscore (_). For example, if the DB2 data sharing group name is DSNCAT, DSNCAT_LOCK1 is the lock structure name.

Ensure that the lock structure is properly defined in the active CFRM policy. The name of the lock structure that IRLM attempted to access is given in this message. IRLM issues message DXR138E to indicate that the lock structure definition could not be accessed in the active CFRM policy.
- IRLM could not connect the lock structure. The reason for the connect failure is given in IRLM message DXR135E.
- IRLM could not join its data sharing group. The reason for the join failure is given in IRLM message DXR134E.
- IRLM joined the wrong group. The set of IRLMs that are connected to a given lock structure must all be members of the same group. Ensure that the GROUP parameter is correctly specified in the IRLM startup procedure. If you give an incorrect group name, IRLM connects the lock structure, and then times out waiting for responses from other connectors. IRLM issues message DXR133I for the timeout.

DSNT802I  ONLY ACTION D (DISPLAY) IS ALLOWED FOR DEPARTMENT STRUCTURE.

Explanation: You cannot add, update, or erase a department structure. You can only display it.

This message is issued by the following panel: DSN8SSH

System Action: The panel is redisplayed, and the cursor is placed on the field in error.

User Response: Change the ACTION field to D, or change the OBJECT field to DE or EM.
**DSNT803I** csect-name DB2 CANNOT IDENTIFY TO IRLM. THE REQUESTED FUNCTION LEVEL IS NOT SUPPORTED.

**Explanation:** An attempt was made to identify to an IRLM that does not support the level of function DB2 needs. This message accompanies abend reason code 00E30800.

**System Action:** DB2 terminates abnormally with reason code 00E30800.

**System Programmer Response:** DB2 Version 6 requires IRLM Version 2.1, at a maintenance level that includes APAR PO15290. Ensure that the STEPLIB statement in your IRLM startup procedure is referencing the correct IRLM code library and that IRLM is at the appropriate level of maintenance.

**DSNT804I** csect-name THERE ARE MODIFY LOCKS OWNED BY THIS DB2 THAT HAVE BEEN RETAINED

**Explanation:** When DB2 disconnected from IRLM during DB2 shutdown, IRLM indicated that there were still outstanding modify locks. These locks were retained by IRLM. The retained locks continue to protect the resources on which they are held from requests from other DB2s in the data sharing group. That is, IRLM rejects any lock request from another DB2 that is incompatible with the retained state of the lock. The locks are retained until the terminating DB2 subsystem is restarted and the resources on which the locks are held are recovered.

**System Action:** DB2 continues with its shutdown processing.

**System Programmer Response:** No response is necessary.

**DSNT805I** NAME TYPE PART STATUS LPL PAGES

**Explanation:** This message indicates the beginning of a set of messages used to display information as a result of a DISPLAY DATABASE command when the keyword LPL is specified. This message contains the headings of the display. (The message appears in one continuous line across the screen, not as shown above.) This message is always followed by one or more DSNT806I messages containing the column data. Refer to message DSNT806I for a description of the data these headings identify.

**DSNT806I** space type part status LPL pages

**Explanation:** This message contains the display information resulting from a DISPLAY DATABASE command when the keyword LPL is specified. It contains the column data describing the status of a table space or index space in the database listed in the preceding DSNT362I message. This message is always preceded by its column headings message DSNT805I. The message number for this message is not displayed.

The message fields have the following meanings:

- **space** The table space name or index space name.
- **type** TS for a table space, IX for an index space, LS for a LOB table space.
- **part** The partition number. It is blank for a nonpartitioned table space or index space.
- **status** One or more of the following, delimited by commas. The maximum length is 18 characters:
  - **ACHKP** The table space is in aux check pending state. ACHKP on a table space indicates that CHECK DATA detected an orphan or missing LOB or an out-of-sync condition between the row in the base table and the LOB in the LOB table space.
  - **AUXW** The table space is in aux warning state. AUXW on a table space indicates that one or more LOBs in the LOB table space is invalid. AUXW on a base table space indicates that CHECK DATA detected an orphan or missing LOB or an out-of-sync condition between the row in the base table and the LOB in the LOB table space.
  - **CHECK** The table space is in check pending status.
  - **COPY** An image copy is required for this object (table space or data set within this table space). STOP is also displayed. If the image copy is required because DB2 encounters a problem during RESTART, STOP is displayed instead of STOP.
  - **GRECP** The object (a table space, a table space partition, index space, or index space partition) is marked recovery pending because of the failure of a group buffer pool. This status value appears only on spaces. It does not apply to databases. See DB2 Data Sharing: Planning and Administration for information about resolving this restricted status.
  - **LPL** The object has pages or ranges of pages that are unavailable because of logical or physical damage.
  - **LSTOP** The logical partition is stopped.
  - **RECP** The table space or index space is in recovery pending status. The member must be restarted to restore full access to the data. For logical partitions, the RECP status can appear as RBDP*.
  - **RO** The database, table space, or index space is started for read activity only.
  - **RW** The database, table space, or index space is started for read and write activity.
  - **STOP** The database, table space, or index space is stopped.
**DSNT807I**  
*sects-name* IRLM PURGE OF RETAINED LOCKS FAILED. RETURN CODE = retcode  
SUB-CODE = subcode  

**Explanation:** DB2 issued a PURGE request to IRLM to purge retained locks for this DB2. The PURGE request did not complete successfully. This message shows the return code and subcode from IRLM.

This message is issued with messages DSNT389I, DSNT394I or DSNT396I to display the pages in the specified space that are unavailable because of logical or physical damage.

**System Action:** DB2 abends with reason code 00E30808.

**System Programmer Response:** Refer to the IRLM codes.

**DSNT809E**  
*sects-name* FEEDBACK FROM IRLM IDENTIFY INDICATED IRLM DID NOT CONNECT TO THE LOCK STRUCTURE  

**Explanation:** DB2 identified to IRLM, but cannot continue because IRLM did not connect to the lock structure. Global locking is ignored. This message accompanies abend reason code 00E30809.

**System Action:** DB2 abnormally terminates with reason code 00E30809.

**System Programmer Response:** This condition happens if you are running DB2 in data sharing mode, but the associated IRLM is running with local scope (SCOPE=LOCAL in the IRLM startup procedure). If you are running DB2 in data sharing mode, ensure that the associated IRLM startup procedure specifies SCOPE=GLOBAL. Conversely, if you are not running DB2 in data sharing mode, ensure that the associated IRLM startup procedure specifies SCOPE=LOCAL.

**DSNT810E**  
*sects-name* DB2 CANNOT IDENTIFY TO IRLM. AN INVALID LOCK STRUCTURE NAME WAS DETECTED.  

**Explanation:** DB2 could not identify to IRLM because of an invalid lock structure name. This message accompanies abend reason code 00E30807.

**System Action:** DB2 startup terminates abnormally with reason code 00E30807.

**System Programmer Response:** This condition happens if you are not running DB2 in data sharing mode, but the associated IRLM is running with global scope (SCOPE=GLOBAL in the IRLM startup procedure). If you are not running DB2 in data sharing mode, ensure that the associated IRLM startup procedure specifies SCOPE=LOCAL. Conversely, if you are running DB2 in data sharing mode, ensure that the associated IRLM startup procedure specifies SCOPE=GLOBAL.

**DSNT811E**  
*sects-name* DB2 CANNOT IDENTIFY TO IRLM. REQUEST VIOLATES ONE DB2 PER IRLM RULE.  

**Explanation:** DB2 could not identify to IRLM because another DBMS is already identified to the IRLM. This message accompanies abend reason code 00E30802.

**System Action:** DB2 abends with reason code 00E30802.

**System Programmer Response:** IRLM Version 2.1 enforces a one to one (1:1) mapping between IRLM and DB2. Multiple DBMS subsystems can no longer use the same IRLM. Ensure that:

- Each DB2 subsystem is associated with its own IRLM subsystem.
- The correct IRLM procedure name and subsystem name are specified in the DB2 system parameters.

**DSNT812I**  
--MEMBER NAME *member-name*  

**Explanation:** This message is issued with messages DSNT389I, DSNT394I or DSNT396I for each thread in a data sharing environment. This additional line reports the member name of the DB2 subsystem accessing this object.

If the characters ‘(CO)’ follow the member name, then this member is the castout owner for the page set or partition. The castout owner for a page set or partition is the DB2 member responsible for doing all of the castout I/O for that page set or partition.

The message number and subsystem recognition character are not included in this message.

**DSNT813I**  
---- status(es) page(s)  

**Explanation:** This message follows message DSNT389I, DSNT392I, DSNT394I, DSNT396I or DSNT806I to display more statuses, or more pages that are in the logical page list (LPL).

LPL pages can be in two formats, single pages (represented by the page number) or a range of pages (represented by the starting page number followed by a dash and the ending page number in the range).

The message number and subsystem recognition character are not included in this message because this message is part of a DISPLAY DATABASE data line.
DSNT814I NON-LOCAL INFORMATION UNAVAILABLE
FOR object = name

Explanation: One member of the DB2 data sharing group was unable to obtain information from another member for one of these reasons:

- Overflow of the maximum buffer area sent to the DB2 subsystem running the DISPLAY. This buffer area contains the DISPLAY information.
- Problems occurred while requesting DISPLAY DB information from peer DB2 subsystems.

Terms pertinent to this message:
object Either DATABASE or SPACE
name The name of the DATABASE or SPACE

User Response:
- Issue DISPLAY GROUP to see if any DB2 members are down or unresponsive and then reissue the DISPLAY DATABASE command.
- Specify individual database names or space names instead of specifying "*".
**DSNU... Messages**

The severity values shown for the utility messages that follow are returned as the job-step condition code from the job step during which the message is issued. If additional messages having higher severity values are issued during the same job step, the higher value is reflected as the job-step condition code.

Severity values have the following meanings:

<table>
<thead>
<tr>
<th></th>
<th>Informational</th>
<th>No error occurred</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Warning</td>
<td>A condition was detected; the user might need to take further action</td>
</tr>
<tr>
<td>8</td>
<td>Error</td>
<td>An error was detected and processing could not continue</td>
</tr>
</tbody>
</table>

---

**DSNU000I**  
**csect-name**  
**OUTPUT START FOR UTILITY,**  
**UTILID = uuuuuuu**  

**Explanation:** This message marks the start of output for the given utility job. The utility ID used to identify the utility job is 'uuuuuuu'.  
**Severity:** 0 (informational)  
**System Action:** Utility processing continues.

---

**DSNU001I**  
**csect-name**  
**RELEASE DEPENDENT MODULE**  
**module-name WAS NOT FOUND**  

**Explanation:** The system could not find the specified module in the indicated library (private library, job library, or link library).  
**System Action:** The utility job is abended.  
**User Response:** Ensure that the load module library is indicated correctly and that the indicated library contains the requested program. If the indicated library does not contain the requested program, contact the system programmer.  
**System Programmer Response:** The last three characters of the module name indicate the DB2 release level of the subsystem identified in the parameters passed to DSNUUTILB. However, LOAD could not find the release dependent utility module for that release in the indicated library. This is probably a maintenance problem.  
**Severity:** 8 (error)  
**System Action:** Utility processing is terminated without invoking the requested utility or utilities.  
**User Response:** Correct your JCL to specify the correct subsystem-name on the EXEC statement, and resubmit the job. Otherwise, contact the system programmer to determine when the subsystem will be available for processing.  
**Operator Response:** Contact the system programmer to determine if a -START DB2 command should be issued for the indicated subsystem.  

---

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, "Problem determination", on page 1051: 1, 5, 32, 46, 60, 61.

---

**DSNU003I**  
**csect-name NOT INVOKED APF AUTHORIZED**  

**Explanation:** The DSNUUTILS stored procedure was not invoked authorized.  
**Severity:** 8 (error)  
**System Action:** The utility is not run by the stored procedure.  
**User Response:** Notify the system programmer.  
**System Programmer Response:** Make sure that the DSNUUTILS entry in SYSIBM.SYSPROCEDURES specifies that the stored procedure runs in a WLM-established address space (WLM_ENV not blank), make sure that the DSNUUTILS load module is link edited with AC(1), make sure the DSNUUTILS load module is in an APF authorized library, and make sure all the libraries in STEPLIB JOBLIB are APF authorized. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.  

---

**Comparison**

© Copyright IBM Corp. 1982, 1999
System Programmer Response: Have the operator issue a -START DB2 command for the indicated subsystem.

Problem Determination: DB2 must be started in order to execute DB2 utilities.

DSNU007I  csect-name  DB2 SYSTEM system-name DOES NOT EXIST

Explanation: Utility startup processing has been unable to connect to the indicated DB2 subsystem, because it does not exist on this system.

Severity: 8 (error)

System Action: Utility processing is terminated without invoking the requested utility or utilities.

User Response: Correct your JCL to specify the correct subsystem-name on the EXEC statement, and resubmit the job. Contact your system programmer if you are not sure which DB2 subsystem you should specify.

System Programmer Response: Ensure that the correct DB2 subsystem has been started via the -START DB2 command.

Problem Determination: DB2 must be started in order to execute DB2 utilities.

DSNU008I  csect-name SPECIFIED USER FAILED VALIDITY CHECK

Explanation: Utility startup processing has been unable to connect to DB2, because the user failed the connection validity check.

Severity: 8 (error)

System Action: Utility processing is terminated without invoking the requested utility or utilities.

User Response: Contact the system programmer for assistance with your installation’s security checking.

System Programmer Response: Locally defined RACF or equivalent security system connection authorization have denied the user access to DB2. Permit DB2 connection authorization if this user should be allowed access.

DSNU009I  csect-name SPECIFIED USER NOT AUTHORIZED FOR DB2 UTILITIES

Explanation: Utility startup processing for the user indicated on the job statement failed, because the user is not authorized to execute DB2 utilities.

Severity: 8 (error)

System Action: Utility processing is terminated without invoking the requested utility or utilities.

User Response: Contact your system programmer for assistance with your installation’s security checking.

System Programmer Response: If the USER specified something on the job statement that is incorrect, correct it, and resubmit the job. Use the SQL GRANT command to give the user the desired authority.

DSNU010I  csect-name UTILITY EXECUTION COMPLETE, HIGHEST RETURN CODE = rr

Explanation: The utility completed processing with a return code of ‘rr’. This indicates that no terminating error was detected.

Severity: 0 (informational) or 4 (warning)

System Action: In most cases, the SYSPRM.SYSUTIL record for this job step is deleted from SYSPRM.SYSUTIL. However, if the utility used was REORG and UNLOAD(PAUSE), the SYSPRM.SYSUTIL record remains intact so that REORG can be restarted at the RELOAD phase.

User Response: If the return code (‘rr’) is 0, no response is required.

If the return code (‘rr’) is 4, the utility output should be examined for other messages.

DSNU012I  csect-name UTILITY EXECUTION TERMINATED, HIGHEST RETURN CODE = rr

Explanation: The utility execution was terminated. An error was detected that would not allow processing to continue. The return code has a value of 8.

Severity: 8 (error)

System Action: Utility processing is terminated.

User Response: Examine utility output for other error messages.

DSNU013I  csect-name JOB WITH DUPLICATE UTILID FOUND IN SYSUTIL

Explanation: An entry with the same qualifier was found in the SYSPRM.SYSUTIL table. The current job did not specify restart.

System Action: The utility job is abended with reason code X’00E40018’.

User Response: If the job was intended to restart the utility, the -TERM utility command should be used to delete the entry that has the same qualifier from the SYSPRM.SYSUTIL table. If the job had no relation to the SYSPRM.SYSUTIL entry job, a new qualifier should be used.

DSNU014I  csect-name JOB WITH DUPLICATE UTILID CURRENTLY EXECUTING

Explanation: A job with the same qualifier was found to be executing.

System Action: The utility job is abended with reason code X’00E40018’.

User Response: If the job with the same qualifier that is currently executing is correct, either wait for the job to complete before using the same qualifier, or use another qualifier. If the job currently executing is incorrect, the -TERM command can be used to terminate it, and the failing job can be resubmitted. Do not -TERM UTILITY a utility job step that is currently active in REORG beyond the UNLOAD phase.
**DSNU015I csect-name JOB WITH UTILID NOT FOUND IN SYSUTIL FOR RESTART**

Explanation: A utility job was submitted to restart a utility job that had previously failed. The SYSIBM.SYSUTIL entry for the specified qualifier provided was not found.

Severity: 8 (error)

System Action: Utility processing is not initiated.

User Response: Use the -DISPLAY utility command to determine the correct qualifier. The job can then be resubmitted.

**DSNU016I csect-name UTILITY BATCH MEMORY EXECUTION ABENDED, REASON=X0rrr**

Explanation: The utility batch address space has abended. If X’0rrr’ is four hexadecimal digits in length (for example, X’00C1’), the abend was a system X’rrr’ abend. If X’0rrr’ is four characters in length and system abend X’0001’ was indicated, a user abend was issued. If X’0rrr’ is eight characters in length, the abend was a system X’04E’ abend, and X’0rrr’ is an abend reason code.

System Action: The utility job is abended. The SYSIBM.SYSUTIL entry for the job is retained in the SYSUTIL table.

User Response: Consult the system programmer to obtain information on failure analysis. If the cause of the failure is correctable, the utility job can be restarted. If the error cannot be corrected, the -TERM command should be used to delete the failing job’s utility id from SYSIBM.SYSUTIL.

System Programmer Response: If a system abend was encountered (4 characters), refer to the appropriate MVS publication. If an abend reason code was encountered (8 characters), refer to DB2 Utility Guide and Reference for problem determination.

**DSNU017I csect-name UTILITY DATABASE SERVICES MEMORY EXECUTION ABENDED, REASON=X0rrr**

Explanation: The database services address space has abended. If X’0rrr’ is four hexadecimal digits in length (for example, X’00C1’), the abend was an MVS X’rrr’ abend. If X’0rrr’ is eight hexadecimal digits in length, the abend was a DB2 subsystem X’04E’ abend, and X’0rrr’ is an abend reason code.

System Action: The utility job is abended. The entry for the job is retained in the SYSIBM.SYSUTIL table.

User Response: Consult with the system programmer to obtain information on failure analysis. If the cause of the failure is correctable, the utility job can be restarted. If the error cannot be corrected, the -TERM command should be used to delete the failing job’s utility id from SYSIBM.SYSUTIL.

System Programmer Response: If an MVS system abend was encountered (4 hexadecimal digits), refer to the appropriate MVS publication. If an abend reason code was encountered (8 hexadecimal digits), look up the reason code in Section 4, DB2 Codes on page 577 and if you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**DSNU018I csect-name JOB IS NOT RESTARTABLE DUE TO -START ACCESS FORCE COMMAND**

Explanation: A utility job was submitted to restart a utility job that had previously failed. Although the SYSIBM.SYSUTIL entry for the specified qualifier was found, the job is not restartable because of a -START ACCESS FORCE command. The -START ACCESS FORCE command deleted the utility-in-process state of one or more (but not all) target objects in the job.

System Action: The utility job is abended with reason code X’00E40018’.

User Response: If the specified qualifier is correct, use the -TERM UTILITY command to terminate the utility and resubmit the job as a nonrestartable job. If the -TERM UTILITY command fails, use the -START ACCESS FORCE command to force all target objects (table spaces and indexes) in the job. When the last object is forced, the SYSIBM.SYSUTIL record is deleted. If the qualifier is incorrect, correct it and restart the job.

**DSNU019I csect-name THIS UTILITY IS NOT ALLOWED AT A DB2 TRACKER SITE**

Explanation: When a DB2 subsystem serves as a tracker site, it cannot run utility csect-name. A DB2 subsystem is also a tracker site if the value of subsystem parameter TRKRSITE is YES. You may run only the following utilities at a tracker site DB2:

- REPORT
- RECOVER without the TORBA, TOLOGPOINT, or TOCOPY options
- DIAGNOSE

Severity: 8 (error)

System Action: The utility terminates.

System Programmer Response: If this DB2 subsystem does not need to serve as a remote site tracker system, remove its tracker site status before re-trying the utility. You may remove the tracker site status by stopping the DB2 subsystem, then restarting it with TRKRSITE = NO.

User Response: Contact the system programmer.

**DSNU020I csect-name JOB STEP INCOMPLETE**

Explanation: The REORG utility was invoked with the UNLOAD PAUSE option. This causes the immediate suspension of the job after the unload phase completes. Subsequent utilities that are invoked in the same job step are not run.

Severity: 4 (warning)

System Action: Further utility processing is terminated.

User Response: Resubmit the job with the RESTART PHASE parameter after the desired user action has been taken with the unload data set.

Problem Determination: Refer to DB2 Utility Guide and Reference for a description of the REORG utility and the UNLOAD PAUSE option.
**DSNU024I**  `csect-name` **PARM FIELD ERROR** `parm-field`

**Explanation:** An error was detected in the PARM field on the EXEC statement. `parm-field` was the input parameter field.

**Severity:** 8 (error)

**System Action:** Utility processing is not initiated.

**User Response:** Correct the indicated parameter on the EXEC DD statement, and resubmit the job.

**Problem Determination:** Refer to DB2 Utility Guide and Reference for parameter requirements.

**Operator Response:** The utility to fail. This is indicated by other messages. The allocation failure may create other problems that will cause attempts to use the most recent prior full image copy data set. If the data set was a full image copy data set, the utility did not exist. The utility proceeds as if it and any later incremental image copies from the MVS dynamic allocation service, and utility attempted to dynamically allocate. If the data set was an incremental image copy data set, the utility was unable to allocate a necessary intermediate data that can be retrieved by DB2. Check that the data set must be capable of storing undamaged output data set is provided. Except in the case of an unload data set, image copy data set, or load or reorganization work file data set. The utility is stopped at the beginning of the phase that used the OS/VS data set.

**System Action:** The utility job is abended. The utility job step is in the stopped state.

**Operator Response:** Correct the JCL and resubmit the job.

**System Programmer Response:** Correct and re-run.

**Explanation:** A connection to the DB2 subsystem failed. `reason-code` is the DB2 reason code that was returned.

**Severity:** 8 (error)

**System Action:** The utility job is terminated.

**User Response:** Check the subsystem ID specified in the EXEC DD statement. If it is correct, the subsystem was not ready for processing. Ask the system programmer when the requested subsystem will again be available for processing.

**Explanation:** The utility was unable to allocate a necessary image copy data set. `dsn` is the data set name that the utility attempted to dynamically allocate. `rr` is the return code from the MVS dynamic allocation service, and `ccc` is the reason code associated with the return code.

**System Action:** The utility proceeds along one of the following paths:

If the data set was an incremental image copy data set, the utility proceeds as if it and any later incremental image copies did not exist.

If the data set was a full image copy data set, the utility attempts to use the most recent prior full image copy data set. The allocation failure may create other problems that will cause the utility to fail. This is indicated by other messages.

**User Response:** If the job fails, contact the system programmer.

**System Programmer Response:** If the utility fails because of the allocation error (as shown by a subsequent message), correct the error, then resubmit the job.

**Problem Determination:** Refer to the appropriate MVS publication for a complete description of the possible return and reason codes from dynamic allocation.

**DSNU031I**  `csect-name` **UNABLE TO UNALLOCATE** `dsn, RC=rr, REASON=ccc`

**Explanation:** The recover utility was unable to unallocate an image copy data set. The data set name that the utility attempted to unallocate is `dsn`. The return code from the MVS dynamic unallocation service is `rr`. The reason code associated with the return code is `ccc`.

**System Action:** The unallocation error is ignored and the utility execution continues.

**Problem Determination:** Refer to MVS/ESA Programming: Authorized Assembler Services Guide for a complete description of the possible return and reason codes from dynamic allocation.

**DSNU032I**  `I/O ERROR ON WORKFILE, xdddddd`

**Explanation:** An I/O error was encountered on a necessary OS/VS data set. `xxxxxx` is a message that describes the error and the data set in error. This message is returned to the DB2 utility by SVC 68 (SYNADAF) from BSAM. The data set may have been needed for an unload data set, image copy data set, or load or reorganization work file data set. The utility is stopped at the beginning of the phase that used the OS/VS data set.

**System Action:** The utility job is abended. The utility job step is in the stopped state.

**Operator Response:** Except in the case of an unload data set during the RELOAD phase, the job can be restarted if an undamaged output data set is provided.

**Problem Determination:** Refer to the appropriate MVS publication for the format of the error message.

**DSNU034I**  `DATA SET TYPE INVALID FOR DDNAME 'dddddddd'`

**Explanation:** A required DD statement with DDNAME=`ddddddddd` was found to have a data set type which is not valid for this application.

**Severity:** 8 (error)

**System Action:** The utility is terminated with a return code 8.

**User Response:** The data set must be capable of storing intermediate data that can be retrieved by DB2. Check that the data set is not specified as type DUMMY, SYSIN, or SYSOUT. If you require assistance in specifying a valid data set type, consult the system programmer.

**System Programmer Response:** Correct the JCL and resubmit the job.

**DSNU035I**  `csect-name` **UNABLE TO FIND DD CARD FOR DDNAME, 'ddddddd'`

**Explanation:** A DD statement with ddbname = `ddddddddd` was found to have a data set type which is not valid for this application.

**Severity:** 8 (error)

**System Action:** The utility is terminated with a return code 8.

**User Response:** If the DNAME is one you submitted, review and correct it. If the DNAME was not provided by you, but by the system, consult the system programmer.

**System Programmer Response:** Correct the JCL and resubmit the job.
DSNU036I  csect-name UNABLE TO OPEN DCB FOR DDNAME dddddddd

Explanation: The DCB associated with DDNAME 'ddddddeee' could not be opened.

System Action: The utility job is abended with a reason code of X’00E40070’. The utility job step is in the stopped state.

User Response: If the ddname is one you submitted, review and correct it. If the ddname was not provided by you but by the system, consult the system programmer.

System Programmer Response: Correct the data set definition, or add DCB information to the JCL. Do a

'RESTART(PHASE)' of the stopped utility, or resubmit the job after issuing a -TERM UTILITY command for the stopped utility.

DSNU037I  csect-name - RECFM=U FOR DDNAME dddddddd

Explanation: A data set to be used by the utility has an undefined record format RECFM=U. All data sets must be fixed or variable, blocked or unblocked.

System Action: The utility job is abended with a reason code of X’00E40070’. The utility job step is in the stopped state.

Operator Response: Notify the system programmer.

System Programmer Response: Ensure that no data sets involved in the utility job have RECFM=U. Resubmit the job after ending the stopped utility by the TERM UTILITY command, or do a 'RESTART(PHASE)' of the stopped utility.

DSNU038I  csect-name - BLOCK SIZE FOR DCB, DDNAME dddddddd, IS TOO SMALL, MUST BE AT LEAST bbbbb bytes

Explanation: The data set with DDNAME 'ddddddeee' has a block size that is too small to accommodate a record that needs to be written.

System Action: The utility job is abended with a reason code of X’00E40079’. The utility job step is left in the stopped state.

User Response: Delete the data set in error. Change the JCL so that the block size for the data set with DDNAME 'ddddddeee' is at least 'bbbbb' bytes. Resubmit the utility job with the 'RESTART(PHASE)' option.

DSNU039I  csect-name - LRECL=0 FOR DDNAME dddddddd

Explanation: A data set to be used by the DB2 utility has a record length of zero after OPEN. All open data sets with a record format of fixed or fixed blocked must have a valid record length greater than zero.

System Action: The utility job is abended with reason code X’00E40070’. The utility job step is left in the stopped state.

User Response: If the DDNAME is for a data set that you submitted, review and correct it. It might be necessary to provide a valid LRECL in the DCB parameter in the JCL. If the DDNAME was not provided by you but by the system, consult the system programmer.

Operator Response: Notify the user or system programmer.

System Programmer Response: Correct the data set definition, or add DCB information to the JCL. Do a

'RESTART(PHASE)' of the stopped utility, or resubmit the job after issuing a -TERM UTILITY command for the stopped utility.

DSNU040I  csect-name ERROR ACCESSING DDNAME ddbname, DECB=Xhex string

Explanation: An error has occurred during BSAM access of a utility temporary file identified by 'ddname'. The DECB indicating the error is given as a hexadecimal string.

System Action: The executing utility issues an X’04E’ abend with abend reason code '00E40071' following this message.

User Response: Refer to the information given in the Problem Determination section of this message. Correct the problem. Either issue the -TERM command to terminate the utility job and resubmit it, or specify the RESTART parameter and resubmit it.

Operator Response: An operator with SYSOPR authority can issue the -TERM UTILITY command to release the resources claimed by the stopped utility (this may not be necessary).

Problem Determination: The DECB provided contains the ECB in the first four bytes. The first byte of the ECB contains status bits that indicate the cause of the error. Refer to the appropriate MVS publication for the meaning of the status bits.

DSNU041I  csect-name INVALID CONCATENATED DATA SET FOR DDNAME dddddddd

Explanation: A non-input concatenated data set was detected. Only input data sets can be concatenated.

System Action: The utility job abended with reason code X’00E40070’. The utility job step is in the stopped state.

Operator Response: Notify the system programmer.

System Programmer Response: Remove the concatenated data sets from the data set with DDNAME 'ddddddeee'. Resubmit the job after ending the stopped utility with the TERM UTILITY command, or restart the utility at the beginning of the stopped phase by using 'RESTART(PHASE)'.

DSNU042I  csect-name SORT PHASE STATISTICS.

NUMBER OF RECORDS=n ELAPSED TIME=hh/mm/ss

Explanation: This message provides statistics on the SORT phase of a utility. The number of records sorted, 'n', and the duration of the SORT phase in hours, minutes, and seconds are provided.

Severity: 0 (informational)

System Action: The system continues to process normally.

DSNU044I  csect-name ERROR FROM SORT COMPONENT RC=,n, UTILITY STOPPED

Explanation: A nonzero return code 'n' was returned from an MVS sort. Error messages from sort are printed on the UTPRINT data set.

System Action: The executing utility job is placed in the stopped state.

User Response: Determine the cause of the error. If the error can be corrected, the utility may be restarted from the beginning of the sort phase by using the RESTART(PHASE) option. If the error is such that the utility cannot complete, the -TERM command should be issued to remove the stopped utility from the system. The -TERM utility option should rarely be exercised when the stopped utility is REORG.
Operator Response: An operator with SYSOPR authority can issue the -TERM UTILITY command to release the resources claimed by the stopped utility (this may not be necessary).

Problem Determination: This abend is accompanied by abend reason code 'X'00E40005', and an SVC dump is requested. In most cases, error messages from MVS sort identify the problem and the dump is not needed. If sort is unable to open the UTPRINT data set, only the message and the abend are provided. For example, if the UTPRINT DD statement is omitted, correct the problem with UTPRINT, and resubmit the job.

DSNU046I csect-name UTILITY STATEMENT IS TOO LONG OR TOO COMPLEX
Explanation: The utility command and associated control statements have caused internal fields to exceed DB2 sub-system limits.
Severity: 8 (error)
System Action: Utility processing is not initiated.
User Response: Reduce the size or complexity of the utility statement where possible. For example, a LOAD into several tables may be broken up into a separate load statement for each table or the size of comparison fields for 'when', 'continue', and 'nulll' operands may be reduced in size.

Problem Determination: Refer to DB2 Utility Guide and Reference for correct operand definitions.

DSNU047I csect-name A REQUIRED DD CARD IS MISSING DDNAME=missing-ddname
Explanation: The DB2 utility being executed requires a data set to continue processing. The DDNAME for the missing data set is provided.
Severity: 8 (error)
System Action: Utility processing terminates.
Operator Response: Notify the system programmer.
System Programmer Response: Correct the JCL to include the indicated DD statement. Refer to DB2 Utility Guide and Reference for information about required DD statements.

DSNU048I csect-name INVALID OPERAND FOR KEYWORD kkkkkkk
Explanation: The utility parser has determined that the operand specified for keyword 'kkkkkkkk' is invalid.
Severity: 8 (error)
System Action: Utility processing is not initiated.
User Response: Correct the operand in error, and resubmit the utility job. Refer to DB2 Utility Guide and Reference for proper option specifications.

DSNU050I csect-name utility-statement
Explanation: This message echoes the utility statement that was input from SYSIN.
Severity: 0 (informational)
System Action: Utility processing continues.

DSNU051I csect-name INSUFFICIENT OPERANDS FOR KEYWORD kkkkkkk
Explanation: An operand that is required when the keyword 'kkkkkkkk' is specified was omitted.
Severity: 8 (error)
System Action: Utility processing is not initiated.
User Response: Correct the operand specification, and resubmit the job. Refer to DB2 Utility Guide and Reference to determine the correct set of operands for 'kkkkkkkk'.

DSNU052I csect-name KEYWORD kkk INCOMPATIBLE WITH OTHER KEYWORDS OR OPERANDS
Explanation: The specified keyword 'kkk' cannot be used with other keywords or operands.
Severity: 8 (error)
System Action: Processing terminates.
User Response: Refer to the DB2 Utility Guide and Reference for the right syntax for the specified keyword.

DSNU053I csect-name FIELD cccccc NOT FOUND
Explanation: Either the column name specified, 'ccccc', was not found in the catalog as a valid column name for the table being processed, or a WHEN keyword field name was not found in the field name list.
Severity: 8 (error)
System Action: Utility processing is not initiated.
User Response: Correct the LOAD utility statement, and resubmit the job.

Problem Determination: Valid column names can be found in the SYSCOLUMNS table.

DSNU054I csect-name TABLESPACE sssssss NOT FOUND
Explanation: The operand of the TABLESPACE keyword, 'ssssssss', did not specify an existing table space name.
Severity: 8 (error)
System Action: Utility processing is not initiated.
User Response: Correct the table space name and/or database name, and resubmit the job.

Problem Determination: Valid table space names can be found in the SYSTABLESPACE catalog table.
**DSNU055I**  
*csect-name INDEX iiiliii NOT FOUND*  
**Explanation:** The index name specified, ‘iiiliii’, was invalid.  
**Severity:** 8 (error)  
**System Action:** Utility processing is not initiated.  
**User Response:** Correct the index name, and resubmit the job.  
**Problem Determination:** Valid index names can be found in the SYSIBM.SYSCOLUMNS catalog table.

---

**DSNU056I**  
*csect-name TABLE ttttttt NOT FOUND*  
**Explanation:** A utility specified a table name ‘ttttttt’, but the table does not exist.  
**Severity:** 8 (error)  
**System Action:** The error is sufficient to terminate further processing of the utility job step. The utility job step is terminated, and resources are released to their prior state.  
**User Response:** Correct the table name and/or database name, and resubmit the utility job step.  
**Problem Determination:** The correct table names can be found by querying the SYSIBM.SYSCOLUMNS catalog table.

---

**DSNU057I**  
*csect-name DATABASE database-name NOT FOUND*  
**Explanation:** The operand of the DATABASE keyword, ‘database-name’, did not specify an existing database name.  
**Severity:** 8  
**System Action:** The error is sufficient to terminate further processing of the utility job step. The utility job step is terminated, and resources are released to their prior state.  
**User Response:** Correct the database name and resubmit the utility job step.  
**Problem Determination:** The correct database names can be found by querying the SYSIBM.SYSCOLUMNS catalog table.

---

**DSNU059I**  
*csect-name utility-name UTILITY NOT ALLOWED AGAINST AN OBJECT IN RECOVERY PENDING STATE*  
**Explanation:** An attempt has been made to execute a utility against an object that is in RECOVERY PENDING STATE. CHECK, COPY, MODIFY, LOAD, QUIESCE, REORG, and RUNSTAT are not allowed.  
**Severity:** 8 (error)  
**System Action:** Utility processing is not initiated.  
**User Response:** Remove the object from the RECOVERY PENDING STATE by using either LOAD REPLACE, RECOVER, or REPAIR against the object. Resubmit the job.  
**System Programmer Response:** Determine which of the three utilities, LOAD REPLACE, RECOVER, or REPAIR, should be used to remove the object from the RECOVERY PENDING STATE.

---

**DSNU060I**  
*csect-name USER userid NOT AUTHORIZED FOR util-name UTILITY ON DATABASE dbase-name*  
**Explanation:** User ‘authorization ID’ attempted to execute utility ‘util-name’ against an object in database ‘dbase-name’. The user was either not authorized to execute utilities for the named database, or the user’s authorization did not include this utility.  
**Severity:** 12 (error)  
**System Action:** Utility processing is not initiated.  
**User Response:** Ensure that the correct database was specified. If the specification is correct, consult the system programmer concerning authorization.  
**System Programmer Response:** Determine why the user was denied access. Either the authorization should be corrected, or another authorized user should invoke the utility.  
**Problem Determination:** The following catalog tables can be examined to determine who has proper authority: SYSIBM.SYSUSERAUTH, SYSIBM.SYSDBAUTH, or SYSIBM.SYSRESAUTH.

---

**DSNU061I**  
*csect-name USER userid NOT AUTHORIZED, UTILID=utilid*  
**Explanation:** The named user issued a utility command and was not authorized to do so. The -TERM UTILITY command can only be issued by:  
- The submitter of the utility job.  
- Users with SYSOPR, SYSADM, or SYSCTRL authority.  
- Users with DBADM, DBCTRL, or DBMAINT authority over every database used by the utility.  
Even for users with sufficient database authority, the TERM UTILITY command will fail in these situations:  
- The user issued the command before the utility determined what databases it would access.  
- The utility job included the DIAGNOSE, REPORT, or STOPOPC utility. Those utilities must be terminated by the submitter of the job or by a holder of SYSOPR, SYSCTRL, or SYSADM authority.  
Any user can issue a -DISPLAY UTILITY command.  
**System Action:** The -TERM UTILITY request for utility identifier utilid is rejected.  
**User Response:** Take the appropriate action:  
- Wait to allow the utility to identify the databases it will access; then reissue the command.
• Obtain the required authorization and reissue the command.
• Have another user with proper authorization issue the command.

**DSNU062I**  csect-name util-name UTILITY MAY NOT BE RUN ON OBJECT qualifier.object-name

**Explanation:** An attempt was made to execute utility 'util-name' against object 'qualifier.object-name'. This is not allowed. The named object cannot be processed by the named DB2 utility.

**Severity:** 8 (error)

**System Action:** The utility job is terminated.

**User Response:** Remove the invalid utility control statements and resubmit the job.

**DSNU063I**  csect-name utility-name UTILITY NOT ALLOWED AGAINST AN OBJECT IN REBUILD PENDING STATE

**Explanation:** An attempt has been made to execute a utility against an object that is in REBUILD PENDING STATE.

- CHECK
- COPY
- MODIFY
- LOAD
- QUIESCE
- REORG
- RUNSTAT

**Severity:** 8 (error)

**System Action:** Utility processing is not initiated.

**User Response:** Remove the object from the REBUILD PENDING state by using either LOAD REPLACE, RECOVER, or REPAIR against the object. Resubmit the job.

**System Programmer Response:** Rebuild the index with the REBUILD utility to remove the object from REBUILD PENDING state.

**DSNU064I**  csect-name UTILITY NOT ALLOWED AGAINST SYSTEM DATABASE

**Explanation:** An attempt was made to execute a utility against database DSNDB01 or DSNDB06. The following utilities are not allowed against DSNDB01:

- LOAD
- REORG TABLESPACE against SYSUTILX (allowed against other DSNDB01 table spaces)
- CHECK DATA
- REPAIR DBD
- RUNSTATS
- MODIFY STATISTICS

The following utilities are not allowed against DSNDB06:

- LOAD (except SYIBM,SYSSTRINGS)
- CHECK DATA
- REPAIR DBD

**Severity:** 8 (error)

**System Action:** Execution of the utility job is stopped.

**User Response:** Remove the invalid utility control statements and resubmit the job.

**DSNU065I**  csect-name UTILITY NOT ALLOWED AGAINST A WORK FILE

**Explanation:** An attempt has been made to execute a utility against database DSNDB07. Utilities are not allowed against work files.

**Severity:** 8 (error)

**System Action:** Execution of the utility job is stopped.

**User Response:** Remove the invalid utility control statement(s) and resubmit the job.

**DSNU066I**  csect-name OPERAND oooooo NOT ALLOWED FOR uuuuuu UTILITY against tttttt TABLE

**Explanation:** An attempt was made to specify the REPLACE option when executing the LOAD utility on a DB2 catalog table. It is not permissible to replace existing rows in a DB2 catalog table. Rows can only be added to the existing rows in a DB2 catalog table.

**Severity:** 8 (error)

**System Action:** Utility processing is not initiated.

**User Response:** Correct the operand, and resubmit the job.

**DSNU067I**  csect-name - TABLE SPACE table-space-name IS NOT A LOB TABLE SPACE

**Explanation:** The table space specified, table-space-name, is not a LOB table space. The object of the utility must be LOB table space.

**Severity:** 8 (error)

**System Action:** Utility returns completion code=8.

**Programmer Response:** Correct the utility statement.

**DSNU068I**  csect-name - function IS NOT SUPPORTED FOR LOB TABLE SPACES

**Explanation:** The function specified, function, is not supported for the LOB table space specified. The LOB table space reported by the message may not be explicitly named in the utility statement.

**System Action:** The utility processing proceeds.

**DSNU069I**  csect-name - AUXILIARY TABLE table-name NOT PERMITTED AS EXCEPTION TABLE

**Explanation:** A auxiliary table was specified as an exception table.

**System Action:** Utility returns completion code=8.

**Programmer Response:** Specify an exception table that is not an auxiliary table.

**DSNU070I**  csect-name KEYWORD OR OPERAND x INVALID WITH y

**Explanation:** The use of KEYWORD or OPERAND 'x' is inconsistent with KEYWORD or OPERAND 'y'.

**Severity:** 8 (error)

**System Action:** The control statement in error is rejected and processing is halted.

**User Response:** Correct the control statement in error and resubmit the job.
The keyword, 'wwwww' is invalid. Reason codes are:

101 An odd number of bytes exists between the shift-out and the shift-in
102 No shift-in was found at the end of the identifier
103 DBCS blanks X'4040' are not allowed
104 There are no characters between the shift-out and the shift-in
105 Shift-out cannot be the first byte of the DBCS character between the shift-out and the shift-in.

Severity: 8 (error)

System Action: Processing is terminated.

User Response: Correct the DBCS identifier and resubmit the job.

Problem Determination: Refer to Chapter 3 of DB2 SQL Reference to determine the correct syntax for DBCS identifiers.

DB2 Messages 377
none now exists, or verify that this job executes no utility state-
ments.

DSNU0811 csect-name OPERAND 'ooooooo' EXCEEDS KEYWORD 'kkkkkkkk' MAXIMUM LENGTH
Explanation: The utility parser has determined that operand 'ooooooo' exceeds the maximum length for keyword 'kkkkkkkk'.
Severity: 8 (error)
System Action: Utility processing is not initiated.
User Response: Correct the operand, and resubmit the job.
Problem Determination: Refer to DB2 Utility Guide and Reference to determine the correct operand specification.

DSNU0821 csect-name INVALID KEYWORD kkkkkkk
Explanation: The given keyword was not recognized within the context of this control statement.
Severity: 8 (error)
System Action: Utility processing is not initiated.
User Response: Correct the keyword, and resubmit the job.

DSNU0831 csect-name INVALID HEXADECIMAL OPERAND hhhhhhhh
Explanation: The utility parser has determined that the operand 'hhhhhhhh' is invalid as a hexadecimal operand. It either contains a character that is not hexadecimal or has an odd number of characters.
Severity: 8 (error)
System Action: Utility processing is not initiated.
User Response: Correct the keyword, and resubmit the job.

DSNU0841 csect-name INVALID GRAPHIC OPERAND gggg
Explanation: The utility parser has determined that the operand 'gggg' is invalid as a hexadecimal operand. The graphic operand is either missing one or both of the shift characters or is not an even number of characters.
Severity: 8 (error)
System Action: Processing is terminated.
User Response: Correct the utility statement, and resubmit the job.

DSNU0851 csect-name INVALID SPECIAL CHARACTER OPERAND sssss
Explanation: The utility parser has determined that the operand 'ssss' is invalid as a special character operand. For a special character operand to be invalid, it must have either a shift-out or a shift-in character and be missing the corresponding shift character, or not have an even number of characters between the shift-out, shift-in characters.
Severity: 8 (error)
System Action: Processing is terminated.
User Response: Correct the utility statement, and resubmit the job.

DSNU0861 csect-name I/O ERRORS ON SPACE= dddddd. DATA SET NUMBER= nnn. I/O ERROR PAGE RANGE= aaaaaa, bbbbbb.
Explanation: I/O errors occurred on the indicated space.
Severity: 0 (informational)
System Action: Processing continues, but the pages within the error range are no longer accessible.
System Programmer Response: Determine the appropriate level of recovery, and invoke the recovery utility. If user-defined data sets are being used and full data set or table space RECOVER is to be used, then, prior to invoking the RECOVER utility, the table space must be stopped, new data set(s) defined, and the table space restarted. If the data set is part of a ROSHARE READ database, determine whether it was a link or DASD failure. If there was a link failure, then fix the link, and issue a -START DATABASE with the ACCESS(FORCE) parameter. If the error was caused by a DASD failure, then correct the problem from the system on which the database was defined as ROSHARE OWNER.
Problem Determination: Refer to Section 4 (Volume 1) of DB2 Administration Guide for a discussion of database recovery procedures.
There may be an IOS message on the MVS console SYSLOG indicating the type of I/O error that occurred. If an IOS message was issued, follow the Problem Determination directions for the message.

DSNU0871 csect-name INVALID OPERAND TYPE FOR KEYWORD kkkkkkk - oooooooo
Explanation: The utility parser has determined that the operand 'ooooooo' is the wrong type for the keyword 'kkkkkkkk'. An example of such an error would be a decimal operand where only a hexadecimal operand is allowed.
Severity: 8 (error)
System Action: Utility processing is not initiated.
User Response: Correct the keyword, and resubmit the job.
Problem Determination: Refer to DB2 Utility Guide and Reference to determine valid operand types for the designated keyword.

DSNU0881 csect-name INVALID CHARACTER OPERAND cccccc
Explanation: The utility parser has determined that the operand 'ccccccc' is invalid as a character operand.
Severity: 8 (error)
System Action: Utility processing is not initiated.
User Response: Correct the keyword, and resubmit the job.
Problem Determination: Refer to DB2 Utility Guide and Reference for correct specification of the character operand.
**DSNU089I**  
*ssect-name OPERAND oooooooo IS TOO LONG*

**Explanation:** The utility parser has determined that the operand 'ooooooo' is too long for the keyword specified.  
**Severity:** 8 (error)  
**System Action:** Utility processing is not initiated.  
**User Response:** Correct the keyword, and resubmit the job.  
**Problem Determination:** Refer to DB2 Utility Guide and Reference for correct operand length specification.

---

**DSNU090I**  
*ssect-name DDNAME nnn IS INVALID FOR KEYWORD kkk*

**Explanation:** The DDNAME 'nnn' was used as an improper input of the specified keyword 'kkk' or from one of the reserved ddnames: SYSIN, SYSPRINT, UTPRINT, SORTWKnn, SORTLIB.  
**Severity:** 8 (error)  
**System Action:** Processing terminates.  
**User Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

---

**DSNU091I**  
*ssect-name DDNAME nnn IS A DUPLICATE*

**Explanation:** The DDNAME 'nnn' was used as operand in the input statement more than once, or it references the same underlying dataset as another DDNAME used in the input statement.  
**Severity:** 8 (error)  
**System Action:** Processing terminates.  
**User Response:** Make sure all DDNAMES used in the input statement and the datasets they reference are unique.

---

**DSNU092I**  
*ssect-name NUMBER OF OPERANDS FOR KEYWORD kkk EXCEEDS MAXIMUM*

**Explanation:** The keyword 'kkk' contains more than the maximum number of operands.  
**Severity:** 8 (error)  
**System Action:** Processing terminates.  
**User Response:** Refer to DB2 Utility Guide and Reference for the limit on the number of operands for the specified keyword.

---

**DSNU094I**  
*ssect-name KEYWORD 'wwwww' IS DUPLICATED*

**Explanation:** The keyword 'wwwww' is not allowed twice.  
**Severity:** 8  
**System Action:** The control statement in error is rejected and the processing is halted.  
**User Response:** Correct the control statement in error, and resubmit the job.

---

**DSNU095I**  
*ssect-name UTILITY uuuuuuuu INCONSISTENT WITH LAST INVOCATION*

**Explanation:** This message can occur when a utility job step is restarted and a utility statement was modified, added or deleted from SYSIN.  
**Severity:** 8 (error)  
**System Action:** Utility processing is terminated. The utility job step remains in SYSIBM.SYSUTIL in the stopped state.  
**User Response:** Restart the utility job with the statements in the same order as they were in when the job was first run. If a statement was modified, change the statement back to the format in the original invocation and restart the job. Utility statements should not be altered for restart.

---

**DSNU096I**  
*ssect-name OPERAND oooooooo INCONSISTENT WITH LAST INVOCATION*

**Explanation:** When the utility job step was restarted, the indicated operand was found to be inconsistent with the restart point.  
**System Action:** The restart of utility processing is not initiated.  
**User Response:** To restart, restore the operand to its prior definition. If this is not acceptable, terminate the utility job step, take corrective action, and resubmit the job.  
**Operator Response:** An operator with SYSOPR authority can terminate the utility job step (this may not be necessary). A REORG utility that is beyond the UNLOAD phase should rarely be terminated.  
**Problem Determination:** Refer to DB2 Utility Guide and Reference for operand definitions. Refer to Section 4 (Volume 1) of DB2 Administration Guide for a discussion of utility restart constraints.

---

**DSNU097I**  
*input WILL BE REQUIRED SYNTAX IN FUTURE RELEASES*

**Explanation:** The identified 'input' is not required in this release, but it will be part of the required syntax in future releases.  
**Severity:** 4 (warning)  
**System Action:** Utility processing continues.  
**Programmer Response:** Refer to DB2 Utility Guide and Reference for the current syntax.

---

**DSNU099I**  
*ssect-name - IRLM *req-type* REQUEST FAILED, IRLM RETURN CODE = X* return-code* IRLM REASON CODE = X* reason-code*'

**Explanation:** The request to the IRLM to obtain or release a lock failed for the reasons specified in return-code and reason-code. In a non data-sharing environment, the requested lock is the utility serialization lock. In a data sharing environment, the requested lock is the utility serialization lock, the utility identifier lock, or the utility execution lock. The IRLM return and reason codes are documented in Section 5, IRLM Messages and Codes on page 1009: The type of request is indicated by req-type.  
**System Action:** Utility and command processing terminates.  
**User Response:** Refer to the IRLM messages and codes section for problem determination and the appropriate action.
Restart the utility by specifying the RESTART parameter, or terminate the utility with the -TERM command and then resubmit the job. If this message was received during the -DIS UTIL, -TERM UTIL, or -START DATABASE ACCESS(FORCE) command, then the command can be reissued.

**System Programmer Response:** Determine the cause of the IRLM error and take appropriate action.

**Problem Determination:** Obtain the system console log output, dump, and SYS1.LOGREC information. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Explanation:**

This message is issued in response to a DISPLAY UTILITY command. The utility job with identifier utilid stopped during processing. In a data sharing environment, member-name identifies the DB2 member. In a non-data-sharing environment, member-name is blank. At the time of the request, object-count records or pages were processed. If the utility job step is restarted with the RESTART(PHASE) option, it begins with phase utility-phase.

However, not all utilities have phases. Those that do have phases are restarted from the beginning of that phase.

The utility stopped for one of these reasons:

- The REORG utility stopped in response to its UNLOAD(PAUSE) option. The utility is stopped in the RELOAD phase.
- The utility is stopped because of a DB2 subsystem failure or cancellation (for example, a STOP DB2 command).

COUNT indicates the number of pages or records processed in a utility phase. COUNT has different meanings for different utilities. For utilities not mentioned below, ignore this field.

- For CHECK INDEX, LOAD, REBUILD INDEX, and REORG: number of records processed (log records for the LOG phase of REORG), or 0 (for the SWITCH or BUILD2 phase of REORG).
- For COPY, MERGECOPY, RECOVER(restore phase), and RUNSTATS: number of pages processed.
- For STOSPACE: number of table spaces or indexes processed.

**Severity:** 0 (informational)

**System Action:** DB2 waits for directions to either restart or terminate the utility.

**User Response:** If you have the required authority, restart or terminate the utility job step.

To restart the job step, you must have authority to run the indicated utility and to complete any other utility functions in the utility job step.

To terminate the utility with the -TERM UTILITY command, you must be the originator or have SYSOPR or SYSADM authority.

**Operator Response:** If necessary, and if you have SYSOPR authority, you can issue the -TERM UTILITY command to release the resources claimed by the stopped utility.

**Example:***

**Explanation:**

This message is issued in response to a -DISPLAY UTILITY command. The utility job step identified by utilid was executing in phase utility-phase at the time the -DISPLAY UTILITY request was made. In a data sharing environment, member-name identifies the DB2 member. In a non-data-sharing environment, member-name is blank. At the time of the request, object-count records or pages were processed.

- For CHECK INDEX, LOAD, REBUILD INDEX, and REORG: number of records processed (log records for the LOG phase of REORG), or 0 (for the SWITCH or BUILD2 phase of REORG).

**Severity:** 8 (error)

**System Action:** Command processing is terminated.

**User Response:** Notify the system programmer so that the pending condition can be resolved.

**System Programmer Response:** Issue a -DISPLAY DATABASE command to determine the state of the DSNDDB01.SYSUTILX table space. If the state is copy pending, do a full image copy. If the state is recovery pending, use the RECOVER utility to recover DSNDDB01.SYSUTILX. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Explanation:**

This message is issued in response to a DISPLAY UTILITY command. It is also issued by the REORG utility if the user specified SHRLVL REFERENCE or CHANGE and DB2 estimates that the switch phase will not start by the deadline specified by the DEADLINE phrase.

This message gives the user an estimate of how much processing the utility completed. The utility-name utility in the utility job step identified by utilid was executing in phase utility-phase at the time the -DISPLAY UTILITY request was made. In a data sharing environment, member-name identifies the DB2 member. In a non-data-sharing environment, member-name is blank.

COUNT n is the number of pages or records processed in a utility phase. COUNT has different meanings for different utilities. For utilities not mentioned below, ignore this field.

- For CHECK INDEX, LOAD, REBUILD INDEX, and REORG: number of records processed (log records for the LOG phase of REORG), or 0 (for the SWITCH or BUILD2 phase of REORG).

**Severity:** 8 (error)

**System Action:** The command processing is terminated.

**User Response:** Enter the command again. This message is issued in response to each command until the utility action on the DSNDDB01.SYSUTILX table space completes.

**System Programmer Response:** Issue a -DISPLAY DATABASE command to determine the state of the DSNDDB01.SYSUTILX table space. If the state is copy pending, do a full image copy. If the state is recovery pending, use the RECOVER utility to recover DSNDDB01.SYSUTILX. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
For COPY, MERGECOPY, RECOVER(restore phase), and RUNSTATS: number of pages processed.

For STOSPACE: number of table spaces or indexes processed.

Severity: 0 (informational)

System Action: The message reflects the state of DB2 at the time of the DISPLAY UTILITY command or the time when DB2 estimated that the switch phase in the REORG utility with SHRLEVEL REFERENCE or CHANGE would not start by the deadline specified by the DEADLINE phrase.

If this message was issued for -DISPLAY UTILITY, the system continues processing. A subsequent -DISPLAY UTILITY command reflects that processing.

**DSNU106I**
csect-name utility-name UTILITY, MEMBER = mem-name UTILID = utilid TERMINATING

Explanation: This message is issued in response to a DISPLAY UTILITY command. The utility-name utility in the utility job step identified by utilid was in the process of terminating at the time the DISPLAY UTILITY request was issued. The utility is terminating in response to a previous TERM UTILITY request.

In a data sharing environment, mem-name identifies the DB2 member. In a non data-sharing environment, mem-name is blank.

Severity: 0 (informational)

System Action: The system is stopping the utility and releasing all resources associated with the utility. After the utility terminates, DB2 can reuse the utility identifier.

**DSNU107I**
csect-name MEMBER NAME mem-name IS NOT A MEMBER OF THIS DATA SHARING GROUP.

Explanation: This message is issued by the DISPLAY UTILITY command when an invalid member-name is encountered in the member list.

Severity: 4

System Action: The DISPLAY UTILITY command ignores the invalid member-name and continues to process the next member name specified.

User Response: Correct the member name and reissue the command.

**DSNU108I**
csect-name DATA SHARING ENVIRONMENT IS NOT ACTIVE, MEMBER KEYWORD NOT APPLICABLE.

Explanation: This message is issued by the DISPLAY UTILITY command when the MEMBER keyword is specified, but data sharing is not active.

Severity: 4

System Action: The DISPLAY UTILITY command ignores the MEMBER keyword and its associated parameters, but continues processing.

User Response: Make sure data sharing is active before issuing the DISPLAY UTILITY command with the MEMBER keyword.

**DSNU109I**
csect-name UTILITY utilid CAN ONLY BE TERMINATED BY MEMBER = mem-name

Explanation: The -TERM UTILITY or -ALTER UTILITY command cannot terminate or alter the utility job with identifier utilid, because it belongs to member mem-name of the DB2 data sharing group. Active utility jobs can be terminated or altered only from the system on which they were running.

Severity: 8 (error)

System Action: If this message was issued for the -TERM UTILITY command, the command ignores the utilid and continues to process the next utilid, if any. If this message was issued for the -ALTER UTILITY command, the command is rejected, and further processing of the command is ended.

User Response: Make sure the utilid identifies the utility you want to terminate or alter. If it does, issue the command from the DB2 member identified in the message.

**DSNU110I**
csect-name UTILID = uuuu INVALID

Explanation: This message is issued in response to an invalid specification of a UTILID on an -ALTER UTILITY, -DISPLAY UTILITY, or -TERM UTILITY command. A UTILID is a 1- to 16-byte alphanumeric token that can contain any number of periods.

Severity: 8 (error)

System Action: The -ALTER UTILITY, -DISPLAY UTILITY, or -TERM UTILITY command is rejected. Further processing of the command is ended.

User Response: Review the UTILID provided in the message to determine why it does not conform to the syntax rules of a utility identifier token, and reissue the request.

**DSNU111I**
csect-name - SUBPHASE=subphase-name COUNT=n

Explanation: This message is issued in response to a -DISPLAY UTILITY command. It immediately follows a prior DSNU105I message if the utility is using subtasks to perform processing in parallel. There will be one of these messages for each subtask.

This message gives the user an estimate of how much processing the utility subtask has completed.

SUBPHASE subphase-name identifies the activity that the subtask was performing at the time the -DISPLAY UTILITY command was issued.

COUNT n is the number of records processed by the utility subtask.

Severity: 0 (informational)

System Action: The system continues processing.

**DSNU112I**
csect-name - NO AUTHORIZED UTILITY FOUND FOR UTILID = utilid

Explanation: This message is issued in response to an -ALTER UTILITY, -DISPLAY UTILITY, or -TERM UTILITY command. DB2 has no record of the utility job identified by the utility identifier utilid. The utilid might not be correct, or the utility might have already terminated.

Severity: 4 (warning)
DSNU114I  csect-name  UTILITY COMMANDS SUBSYSTEM FAILURE, REASON=xcode

Explanation: This message indicates an abend has occurred in the utility commands subsystem.

System Action: The system rejects the -ALTER UTILITY, -DISPLAY UTILITY, or -TERM UTILITY request for the indicated utility job.

User Response: Verify that the utility identifier of the utility job to be altered, displayed, or terminated is correctly entered. To view all currently valid identifiers, issue the -DISPLAY UTILITY (*) or (partial-utility-id*) command.

DSNU115I  csect-name utility-name UTILITY WITH UTILID = utilid CAN ONLY BE TERMINATED BY A MEMBER WITH THE SAME RELEASE = release

Explanation: Command TERM UTILITY cannot terminate the utility job with identifier utilid because it belongs to a member with a release level different from the message. Some utilities can be terminated only from a member of the DB2 data sharing group with the same release level.

Severity: 4 (warning)

System Action: Command TERM UTILITY is rejected for the indicated utility job.

User Response: Make sure the utilid identifies the utility you want to terminate. If it does, issue command TERM UTILITY from a member with a release level different from the message in the DB2 data sharing group.

DSNU160I  csect-name utility-name UTILITY, UTILID = utilid REQUESTED TO TERMINATE, PHASE = utility-phase WAS ACTIVE

Explanation: This message is issued in response to a -TERM UTILITY command. It acknowledges that the request for termination was received and verified. At the time the -TERM UTILITY request was received, utility 'utility-name' was ACTIVE in the utility job step identified by UTILID 'utilid'.

System Action: DB2 has accepted the request to terminate the indicated utility job step. The utility terminates at its next cleanup point.

User Response: This message indicates that either the request was redundant, or someone else is also interested in the termination of the subject utility job step.

DSNU164I  csect-name cccccccc UTILITY, UTILID = uuuuu ALREADY TERMINATING

Explanation: This message is in response to a -TERM UTILITY command. It indicates that the utility job step indicated by UTILID 'uuuuu' has already been requested to terminate and is in the process of doing so now.

Severity: 0 (informational)

System Action: Command TERM UTILITY terminates the indicated utility job step. Upon completion, all resources will have been released to their prior state, and all tracking of the indicated UTILID will have been removed. At that point, the UTILID is available for reuse.

User Response: This message indicates that either the request was redundant, or someone else is also interested in the termination of the subject utility job step.

DSNU166I  csect-name utility-name UTILITY, UTILID = uid NOT EXECUTING, CLEANUP COMPLETE

Explanation: This message is in response to a -TERM UTILITY command. The 'utility-name' utility identified by UTILID 'uid' was found to be stopped at the time of the request to terminate.

Severity: 0 (informational)

System Action: Cleanup is performed for the indicated stopped utility. All resources held by the utility are freed and all storage of the utility job is deleted. The utility job is no longer restartable.

System Programmer Response: Resources held by this utility may have prevented applications, commands, and other utilities from executing. These have been freed, so that the inhibited tasks may now be performed.
**DSNU170I  csect-name  UTILITY JOB TERMINATED BY TERM COMMAND**

**Explanation:** A -TERM UTILITY command was issued for this utility job step.

**Severity:** 8 (error)

**System Action:** The executing utility terminates processing and frees all held resources. All storage of the utility job has been deleted. Therefore, the job is not restartable. Subsequent utilities in the same job step are not executed.

**User Response:** All or portions of the utility job step can be resubmitted as needed.

**DSNU172I  csect-name  UTILITY JOB TERMINATED BY STOP DB2 COMMAND**

**Explanation:** A -STOP DB2 command was issued during execution of the utility job step.

**Severity:** 8 (error)

**System Action:** The executing utility stops processing but continues to hold resources. Subsequent utilities in the same job step are not executed. The storage of the utility job is retained. Therefore, the utility job step is restartable.

**User Response:** Following a -START DB2 command, the utility job step may be restarted. Alternatively, the utility may be terminated using the -TERM UTILITY command and resubmitted as a new job. A REORG utility that has passed the UNLOAD phase should rarely be terminated.

**DSNU180I  csect-name  UTILITY IS NOT COMPATIBLE WITH THE utility-name UTILITY, UTILID = uid, OBJECT = spacename.object-name.**

**Explanation:** Certain utilities cannot process the same table or index space at the same time. The message identifies the objects for which the incompatibility occurred.

- These objects might be target objects of the utilities, a mapping table, or they might be catalog or directory table spaces that are updated by the utilities. For example, DSNDB06.SYSCOPY is updated by LOAD.

**Severity:** 8 (error)

**System Action:** The starting utility is not initiated, and further utility processing in that utility job step is terminated.

**User Response:** Use -DISPLAY UTILITY with the provided 'uid' to determine when the utility that caused your utility to be rejected is completed. Refer to Section 5 (Volume 2) of DB2 Administration Guide for a discussion of which utilities are mutually compatible.

**DSNU181I  csect-name  RESTART NOT ALLOWED FOR utility-name UTILITY**

**Explanation:** An attempt was made to restart the named utility. DB2 does not allow this utility to be restarted.

**System Action:** Utility processing is abended. Abend reason code 00E40018 might be issued.

**User Response:** Issue the -TERM UTIL command to terminate the utility job and then rerun the job without the RESTART parameter.

**System Programmer Response:** If necessary, take actions to prevent access to the table space before terminating the utility.

**DSNU182I  csect-name utility-name MUST BE THE ONLY UTILITY IN SYIN**

**Explanation:** The submitted utility control statements contain a utility on the table space DSNDB01.SYSUTILX. This table space is integral to controlling the execution of utilities. Control over previous or subsequent utilities in the job step would be lost if the utility were allowed to execute. Therefore, the identified utility must be the only utility in a job step.

This message is also issued if you recover the SYSUTILX indexes, DSNLU01 and DSNLU02, or table space DSNDB01.DBD01 and include other utility control statements in the same job step.

**Severity:** 8 (error)

**System Action:** Work performed by utilities in the same utility job step prior to the starting utility persist. The utility identified and subsequent utilities are not allowed to execute, and the utility job step is placed in the stopped state.

**User Response:** Termiate the utility execution that received this message using the -TERM UTILITY command. Submit a subsequent job step containing only the identified utility. Execute additional utilities, if any, in a separate job step.

**DSNU183I  csect-name - utility-name UTILITY NOT COMPATIBLE WITH OTHER ACTIVE UTILITIES**

**Explanation:** The utility identified by 'utility-name' is executing against table space DSNDB01.SYSUTILX. This table space is integral to controlling the execution of utilities. Control over other utilities running at the same time would be lost if the utility were allowed to execute. Therefore, the identified utility must be executed alone. There must be no other active DB2 utilities in the system.

**Severity:** 8 (error)

**System Action:** Utility execution is terminated.

**User Response:** Rerun the utility when there are no other utilities executing. Use the -DISPLAY UTILITY command to see what utilities are ACTIVE. Utilities in the STOPPED state are allowed.

**DSNU184I  csect-name - DO NOT RECOVER OBJECT qual.obj-nm UNTIL THE NEXT TRACKER SITE RECOVERY CYCLE**

**Explanation:** If DB2 detects an inconsistency relating to a utility's status on object 'qual.obj-nm' at the tracker site, DB2 issues this message. This event can occur if the SYSUTIL record for the utility either does not exist, or reflects incorrect information about the status of the utility.

**Severity:** 8 (error)

**System Action:** The utility issues ABEND04E with return code 00E40009.

**User Response:** Contact the system programmer.

**System Programmer Response:** Wait for the next recovery cycle to recover the object named in this message. If the object named in this message is a catalog or directory object, you cannot recover this object, or any other objects in the list of catalog and directory objects, or any user data or indexes. Wait until the next recovery cycle to recover the object.
DSNU185I  csect-name THE VSAM DATA SET DOES NOT
EXIST FOR obj-type obj-qual.obj-name part part-
umber
Explanation: The VSAM data set(s) for the specified object
has not been defined yet because the object was created with
DEFINE NO. Only the LOAD REPLACE utility can be run on
an object that is undefined.
Severity: 8 (error)
System Action: The utility ends without processing the
object.
Operator Response: Remove the object name from the utility
statement and resubmit the utility job.

DSNU200I  csect-name - ERROR RANGE ON TABLE
SPACE database.tablespace-name PROHIBITS
PROCESSING
Explanation: The utility encountered an error range on the
identified table space or partition, which prohibits it from contin-
uing.
Severity: 8 (error)
System Action: The utility fails serialization and terminates.
User Response: Correct the error range for the table space
by running RECOVER ERROR RANGE. Then resubmit the
original failing utility.

DSNU201I  csect-name - ERROR RANGE ON INDEX
creator.index-name PROHIBITS PROCESSING
Explanation: The utility encountered an error range on the
identified index space or partition which prohibits it from contin-
uing.
Severity: 8 (error)
System Action: The utility fails serialization and terminates.
User Response: Identify the incorrect error range by issuing
the DISPLAY command for the index. Run the RECOVER or
REBUILD INDEX utility to restore the index or index partition
that has the error range. Then resubmit the original failing utility.

DSNU202I  csect-name - REBUILD PENDING ON TABLE
SPACE database.tablespace-name PROHIBITS
PROCESSING
Explanation: An attempt was made to execute a utility
against a table space that is in a rebuild pending state.
Severity: 8 (error)
System Action: Utility processing terminates.
User Response: Remove the table space from the rebuild
pending state by using either LOAD REPLACE, REBUILD, or
REPAIR against the object. LOAD REPLACE with
KEEPDICTIONARY is not allowed on a table space (with com-
pression active) in the rebuild pending state. Resubmit the job.
System Programmer Response: Determine which of the
three utilities, LOAD REPLACE, REBUILD, or REPAIR, should
be used to remove the object from the rebuild pending state.

DSNU203I  csect-name - REBUILD PENDING ON INDEX
creator.index-name PROHIBITS PROCESSING
Explanation: An attempt was made to execute a utility
against an index that is in a rebuild pending state.
Severity: 8 (error)
System Action: Utility processing is not initiated.
User Response: Remove the index from the rebuild pending
state by using the REBUILD INDEX utility against the index. .
Resubmit the job.

DSNU204I  csect-name - PAGESET REBUILD PENDING ON
INDEX creator.index-name PROHIBITS PROCESSING
Explanation: An attempt was made to execute a utility
against a logical partition of an index when the index is in
PAGESET REBUILD pending state,
Severity: 8 (error)
System Action: Utility processing terminates.
User Response: Remove the index space from PAGESET
rebuild pending state by running the REBUILD INDEX utility
against the entire index, not just a single logical partition.
Resubmit the job.

DSNU205I  csect-name - LOGICAL ERROR RANGE
(LOGICAL PAGE LIST) ON TABLE SPACE
database.tablespace-name PROHIBITS PROC-
ESSING
Explanation: The utility cannot continue because it encount-
ered a logical error range (logical page list) on the identified
table space or partition.
Severity: 8 (error)
System Action: The utility terminates.
User Response: Use the -START DATABASE command to
correct the logical error range (LPL) for the table space. Then
resubmit the original failing utility.

DSNU206I  csect-name - LOGICAL ERROR RANGE
(LOGICAL PAGE LIST) ON INDEX
creator.index-name PROHIBITS PROCESSING
Explanation: The utility cannot continue because it encount-
ered a logical error range (logical page list) on the identified
index space or partition.
Severity: 8 (error)
System Action: The utility terminates.
User Response: Issue the -DISPLAY command for the index
to identify the logical error range (LPL). There are two ways to
restore the index or index partition that has the LPL before
resubmitting the original failed utility.
- Issue the START DATABASE command to clear the LPL
status, then run the RECOVER or REBUILD INDEX utility.
- Run the RECOVER or REBUILD INDEX utility to restore
the entire nonpartitioning index (NPI).
The user cannot execute a utility on a table space that is in a group buffer pool recovery pending status.

System Action: Utility processing does not start.

User Response: Use the -START DATABASE command to remove the table space from the group buffer pool recovery pending status. Then resubmit the job.

You cannot execute a utility on an index that is in a group buffer pool recovery pending (GRECP) status.

System Action: Utility processing does not start.

User Response: Run the REBUILD INDEX utility on the index to remove the table space from the group buffer pool recovery pending status. Then resubmit the job.

You cannot execute a utility on an index that is in a restart pending state.

System Action: Utility processing is not initiated.

System Programmer Response: Use the DISPLAY THREAD TYPE(POSTPONED) to determine the status of the resource. Use the RECOVER POSTPONED command if recovery has not already been started. Resubmit the job.

An attempt was made to execute a utility against a table space or index space that is in an AUX CHECK PENDING state.

System Action: Utility terminates and returns completion code=8.

Programmer Response:

Run the CHECK DATA utility with the AUXERROR INVALID-DATE option. If there are no AUX CHECK errors, AUX CHECK PENDING will be reset. If AUX CHECK errors are found, AUX CHECK PENDING will be reset and the table space will be set to an AUX WARNING state. This allows the rows with AUX CHECK errors to be corrected. Correct the errors and rerun CHECK DATA. If no more AUX CHECK errors are found, the AUX WARNING state will be reset.

An attempt was made to execute a utility against an index that is in rebuild pending state.

System Action: Utility processing is not initiated.

User Response: Remove the table space from the rebuild pending state by using REBUILD INDEX against the index. Resubmit the job.

A compression dictionary was built for the specified table space. This message is issued during the RELOAD phase of the LOAD utility and at the end of the UNLOAD phase of the REORG utility.

The variable ‘n’ is the number of dictionary entries: 512, 1024, 2048, 4096, or 8192. ‘m’ depends on the number of rows being loaded or reorganized.

‘m’ is the number of rows used to build the dictionary.

Severity: 0 (informational)

System Action: Processing continues.
**DSNU232I**  csect-name KEEPDICTI ONARY REQUESTED BUT COMPRESS ATTRIBUTE NOT DEFINED FOR TABLE SPACE table-space-name

**Explanation:** The KEEPDICTI ONARY option was specified in the LOAD or REORG TABLESPACE utility statement. This keyword should only be used with table spaces that have the COMPRESS YES attribute. Otherwise, it is ignored. The COMPRESS column of SYSIBM.SYSTABLEPART contains the current compression status.

**Severity:** 4 (warning)

**System Action:** Processing continues. If the dictionary exists, it is erased if LOAD REPLACE or REORG is specified.

---

**DSNU233I**  csect-name COMPRESSION DICTIONARY DOES NOT EXIST FOR TABLE SPACE table-space-name

**Explanation:** The KEEPDICTI ONARY option was specified in the LOAD or REORG TABLESPACE utility statement for a table space that does not have a compression dictionary.

**Severity:** 4 (warning)

**System Action:** Processing continues. A dictionary is built for the table space.

---

**DSNU234I**  csect-name COMPRESSION REPORT FOR TABLE SPACE table-space-name

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>noncmpbytes</td>
<td>KB WITHOUT COMPRESSION</td>
</tr>
<tr>
<td>cmpbytes</td>
<td>KB WITH COMPRESSION</td>
</tr>
<tr>
<td>percsave</td>
<td>PERCENT OF THE BYTES SAVED FROM COMPRESSED DATA ROWS</td>
</tr>
<tr>
<td>pctrowcomp</td>
<td>PERCENT OF THE LOADED ROWS WERE COMPRESSED</td>
</tr>
<tr>
<td>noncmppages</td>
<td>PAGES REQUIRED WITHOUT COMPRESSION</td>
</tr>
<tr>
<td>cmppages</td>
<td>PAGES REQUIRED WITH COMPRESSION</td>
</tr>
<tr>
<td>auncmprownlen</td>
<td>BYTES FOR AVERAGE UNCOMPRESSED ROW LENGTH</td>
</tr>
<tr>
<td>avgcmprownlen</td>
<td>BYTES FOR AVERAGE COMPRESSED ROW LENGTH</td>
</tr>
<tr>
<td>pagesave</td>
<td>PERCENT OF THE DB2 DATA PAGES SAVED USING COMPRESSED DATA</td>
</tr>
</tbody>
</table>

**Explanation:** The data in the table space was compressed. This message is issued at the end of the RELOAD phase for the LOAD and REORG utility. The statistics that follow apply only to the data that was loaded or reorganized. For example, RESUME(YES) reports statistics only on the additional rows that were loaded, not what was previously in the table space.

The compression statistics follow:

- **noncmpbytes**: The total number of uncompressed KB (where KB = 1024 bytes) for the loaded or reorganized data rows (including the row prefix). This number was rounded to the nearest KB.

- **cmpbytes**: The total number of compressed KB for the loaded or reorganized data rows (including the row prefix). This number was rounded to the nearest KB.

- **percsave**: The percentage of bytes saved from the loaded or reorganized data rows as a result of compression.

The values above reflect only the number of bytes for the data row and the respective row prefix (6 bytes). DB2 page and dictionary page overhead is not included.

**Severity:** 0 (informational)

**System Action:** Processing continues.

---

**DSNU235I**  csect-name THE COMPRESSION DICTIONARY WAS NOT BUILT FOR TABLE SPACE table-space-name

**Explanation:** There is insufficient data to build a compression dictionary. For the LOAD utility, the input data set is empty or all of the input records were discarded. For the REORG TABLESPACE utility, the table space is empty. The data was not compressed.

**Severity:** 4 (warning)

**System Action:** Processing continues.

**User Response:** The input data set must contain data in order to build a compression dictionary while running the LOAD utility. Ensure that the input records are not discarded by the WHEN clause or conversion errors. For the REORG TABLESPACE utility, the table space must be populated with data in order to build a compression dictionary.

---

**DSNU236I**  csect-name DICTIONARY FOR TABLE SPACE table-space-name HAS BEEN ERASED.

**Explanation:** The compression dictionary of the specified table space was erased.

**Severity:** 0 (informational)

**System Action:** Processing continues.
DSNU241I csect-name DICTIONARY WITH n ENTRIES HAS BEEN SUCCESSFULLY BUILT FROM m ROWS FOR TABLE SPACE table-space-name, PARTITION part-num

Explanation: A compression dictionary was built for the specified partition of the table space. This message is issued during the RELOAD phase of the LOAD utility and at the end of the UNLOAD phase of the REORG utility.

The variable 'n' is the number of dictionary entries: 512, 1024, 2048, 4096, or 8192. 'n' depends on the number of rows being loaded or reorganized.

'm' is the number of rows used to build the dictionary.

Severity: 0 (informational)

System Action: Processing continues.

DSNU242I csect-name KEEPDICIONARY REQUESTED BUT COMPRESS ATTRIBUTE NOT DEFINED ON TABLE SPACE table-space-name, PARTITION part-num

Explanation: The KEEPDICIONARY option was specified in the LOAD or REORG TABLESPACE utility statement. This keyword should only be used with table space partitions that have the COMPRESS YES attribute. Otherwise, it is ignored. The COMPRESS column of SYSIBM.SYSTABLEPART contains the current compression status.

Severity: 4 (warning)

System Action: Processing continues. If the dictionary exists, it is erased if LOAD REPLACE or REORG is specified.

DSNU243I csect-name COMPRESSION DICTIONARY DOES NOT EXIST FOR TABLE SPACE table-space-name, PARTITION part-num

Explanation: The KEEPDICIONARY option was specified in the LOAD or REORG TABLESPACE utility statement for a table space partition that does not have a compression dictionary.

Severity: 4 (warning)

System Action: Processing continues. A dictionary is built for the table space partition.

DSNU244I csect-name COMPRESSION REPORT FOR TABLE SPACE table-space-name, PARTITION part-num

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>noncmpbytes</td>
<td>KB WITHOUT COMPRESSION</td>
</tr>
<tr>
<td>cmpbytes</td>
<td>KB WITH COMPRESSION</td>
</tr>
<tr>
<td>percentsave</td>
<td>PERCENT OF THE BYTES SAVED FROM COMPRESSED DATA ROWS</td>
</tr>
<tr>
<td>pctrowcomp</td>
<td>PERCENT OF THE LOADED ROWS WERE COMPRESSED</td>
</tr>
<tr>
<td>noncmppages</td>
<td>PAGES REQUIRED WITHOUT COMPRESSION</td>
</tr>
<tr>
<td>cmppages</td>
<td>PAGES REQUIRED WITH COMPRESSION</td>
</tr>
<tr>
<td>aucmprowlen</td>
<td>BYTES FOR AVERAGE UNCOMPRESSED ROW LENGTH</td>
</tr>
<tr>
<td>avgcmprowlen</td>
<td>BYTES FOR AVERAGE COMPRESSED ROW LENGTH</td>
</tr>
<tr>
<td>pagesave</td>
<td>PERCENT OF THE DB2 DATA PAGES SAVED USING COMPRESSED DATA</td>
</tr>
</tbody>
</table>

Explanation: The data in the table space partition was compressed. This message is issued at the end of the RELOAD phase for the LOAD and REORG utility. The statistics that follow apply only to the data that was loaded or reorganized. For example, RESUME.YES reports statistics only on the additional rows that were loaded, not what was previously in the table space.

The compression statistics follow:

- noncmpbytes: The total number of uncompressed KB (where KB = 1024 bytes) for the loaded or reorganized data rows (including the row prefix). This number was rounded to the nearest KB.
- cmpbytes: The total number of compressed KB for the loaded or reorganized data rows (including the row prefix). This number was rounded to the nearest KB.
- percentsave: The percentage of bytes saved from the loaded or reorganized data rows as a result of compression.
- pctrowcomp: The percentage of the rows that were compressed within the total number of rows that were loaded or reorganized. The stored length and the external length of a row was compared to determine if the row was compressed. If an EDITPROC is involved, its effect on the length of the row is considered in the calculation.
- noncmppages: The estimated number of DB2 pages required by the uncompressed data rows that were loaded or reorganized. Space required for PCTFREE and FREEPAGE is included. This number was rounded up to the next integer.
- cmppages: The estimated number of DB2 pages required by the compressed data rows that were loaded or reorganized. Space required for PCTFREE and FREEPAGE is included. Dictionary pages are also included unless a LOAD RESUME.YES was run. This number was rounded up to the next integer.
- aucmprowlen: Average uncompressed row length.
- avgcmprowlen: Average compressed row length.
- pagesave: An estimate of the percentage of DB2 pages saved by compressing the loaded or reorganized data rows.

Severity: 0 (informational)

System Action: Processing continues.
### DSNU245I  csect-name THE COMPRESSION DICTIONARY WAS NOT BUILT FOR TABLE SPACE table-space-name, PARTITION part-num

**Explanation:** There is insufficient data to build a compression dictionary. For the LOAD utility, the input data set is empty or all of the input records were discarded. For the REORG TABLESPACE utility, the partition is empty. The data was not compressed.

**Severity:** 4 (warning)

**System Action:** Processing continues.

**User Response:** The input data set must contain data in order to build a compression dictionary while running the LOAD utility. Ensure that the input records are not all being discarded by the WHEN clause or conversion errors. For the REORG TABLESPACE utility, the partition must be populated with data in order to build a compression dictionary.

### DSNU246I  csect-name DICTIONARY FOR TABLE SPACE table-space-name, PARTITION part-num HAS BEEN ERASED.

**Explanation:** The compression dictionary of the specified partition of the table space was erased.

The COMPRESS attribute of the table space partition is NO, and there are no active rows in this partition. In this case, the LOAD RESUME NO utility erases the dictionary.

**Severity:** 0 (informational)

**System Action:** Processing continues.

### DSNU250I  csect-name UNLOAD PHASE COMPLETE, ELAPSED TIME = hh/mm/ss

**Explanation:** The UNLOAD phase of the REORG utility completed normally. The time that elapsed between the beginning of the REORG utility and the completion of the UNLOAD phase was hh/mm/ss, hours, minutes, and seconds, respectively.

**Severity:** 0 (informational)

**System Action:** Action subsequent to this message depends on the UNLOAD option of the REORG utility statement:

- If the UNLOAD option is CONTINUE, execution of the utility continues into the RELOAD phase.
- If the UNLOAD option is PAUSE, execution of the utility is stopped at the beginning of the RELOAD phase.
- If the UNLOAD option is ONLY, the REORG utility is finished. Processing continues to the next utility in the utility process, or, if there are no more utility statements, the utility job step terminates normally.

**User Response:** The user’s response depends on the UNLOAD option in the REORG utility statement:

- If the UNLOAD option is CONTINUE, no operator response is required. The message is informational only.
- If the UNLOAD option is PAUSE, the REORG utility is stopped in the reload phase. To complete the REORG process, the user must explicitly restart the utility job step using the RESTART(PHASE) option.
- If the UNLOAD option is ONLY, the REORG utility has completed, and the requested output is on the data set identified by the DD statement of the UNLDDN REORG utility statement option.

**Operator Response:** The operator’s response depends on the UNLOAD option of the REORG statement:

- If the UNLOAD option is CONTINUE, no operator response is required. The execution of the REORG utility is proceeding.
- If the UNLOAD option is PAUSE, further processing is dependent upon restarting the utility job step with the RESTART(PHASE) option. Until that time, resources are held exclusively by the REORG utility job step.
- If the UNLOAD option is ONLY, the REORG utility processing is complete. The data set defined by the DD statement nominated by the UNLDDN option is available for installation disposition.

### DSNU251I  csect-name UNLOAD PHASE STATISTICS. NUMBER OF RECORDS UNLOADED= mmmmmmmm FOR TABLESPACE tttttttt PART nn

**Explanation:** This message is issued at the completion of the UNLOAD phase of the REORG utility. It gives the number of records that were unloaded mmmmmmmm for the indicated partition nn of table space ttttttt. The count can indicate the amount of processing.

**Severity:** 0 (informational)

**System Action:** Only valid table records are unloaded. Dropped table record counts are not reported.

**User Response:** The record count represents the current cardinality of the indicated partition. Consider invoking the RUNSTATS utility and then rebinding the involved PLANs if this value differs greatly from the SYSTABLE.CARD value so that the SQL optimizer can bring the PLANs up to date.

**Operator Response:** Count can be indicative of the amount of processing remaining.

### DSNU252I  csect-name UNLOAD PHASE STATISTICS. NUMBER OF RECORDS UNLOADED= mmmmmmmm FOR TABLESPACE tttttttt

**Explanation:** This message is issued at the completion of the UNLOAD phase of the REORG utility. It gives the number of records that were unloaded mmmmmmmm for the indicated table space ttttttt.

**Severity:** 0 (informational)

**System Action:** Only valid table records are unloaded. Dropped table record counts are not reported.

**User Response:** Record count represents the current cardinality of the indicated table. Invocation of the RUNSTATS utility and a subsequent rebinding of the involved PLANs should be considered if this value differs greatly from the SYSTABLE.CARD value so that the SQL optimizer can bring the PLANs up to date.

**Operator Response:** Count can be indicative of the amount of processing remaining.

### DSNU253I  csect-name UNLOAD PHASE STATISTICS. NUMBER OF RECORDS action= mmmmmmmm FOR TABLE table-name

**Explanation:** This message is issued at the completion of the UNLOAD phase of the REORG utility. If action is ‘UNLOADED’, it gives the number of records mmmmmmmm that were unloaded for the specified table name. If action is ‘DISCARDED’, it gives the number of records mmmmmmmm that were discarded for the specified table name.

**Severity:** 0 (informational)
System Action: Table records were unloaded or discarded.

**DSNU254I**  

csect-name - RECORD COUNTS INCONSISTENT FOR pppppppp PHASE, NUMBER OF RECORDS EXPECTED = nnnnnn, NUMBER OF RECORDS PROCESSED = aaaaaaa

Explanation: This message is issued during the ‘pppppppp’ phase for the REORG utility to report the condition where the number of records ‘nnnnnn’ passed to the current phase is not equal to the number of records ‘aaaaaaa’ processed in this phase.

Severity: 4 (warning)

System Action: Processing continues if UNLOAD PAUSE option was used.

User Response: Check if unload data set was altered by user. Determine if the inconsistent record counts between the unload and reload phases is a potential problem. If it is an internal DB2 problem, report to system programmer.

System Programmer Response: Determine the failing environment. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: If the unload data set was manipulated by user during restart process, make sure it was handled properly. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2, 5.

**DSNU255I**  

csect-name - KEY COUNT INCONSISTENT FOR pppppppp PHASE, NUMBER OF KEYS EXPECTED = nnnnnn, NUMBER OF KEYS PROCESSED = aaaaaaa.

Explanation: This message is issued during the ‘pppppppp’ phase for the LOAD or REORG utility to report the condition where the number of keys, ‘nnnnnn’, passed to the current phase is not equal to the number of keys, ‘aaaaaaa’, processed in this phase. One or more of the affected indexes may be inconsistent.

Severity: 8 (error)

System Action: Processing stops and all indexes are placed in rebuild pending state.

User Response: TERM the utility and re-access the indexes by running REPAIR utility to reset the rebuild-pending states on indexes. Run the CHECK INDEX utility to determine if any of the affected indexes are inconsistent. Inconsistent indexes can be rebuilt by the REBUILD INDEX utility.

System Programmer Response: Determine the failing environment. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: If the working data set was manipulated by the user during the restart process, make sure it was handled properly. Refer to DB2 Utility Guide and Reference.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**DSNU256I**  

csect-name INVALID PARTITION SPECIFICATION

Explanation: This message is issued by the utility in response to an invalid PART option specification.

The PART option is invalid in the following situations:

- when it is specified for a nonpartitioned table space
- if the indicated PART integer is not pertinent to the partitions existing for the indicated table space
- or if a ROWID column is part of the partitioning key
- if LOAD INTO TABLE PART x is performed on a table space where an identity column is part of the partitioning key

The utility job step is terminated.

System Action: The error is sufficient to terminate further processing of the utility job step. The utility job step is terminated, and resources are released to their previous state.

User Response: Determine the correct partition specification for the table space that was the subject of the specified control utility statement, and resubmit the utility job step. Examine the SYSTABLESPACE in the DB2 catalog for the correct range of partition numbers for the table space. If a ROWID column is part of the partitioning key, the PART option is invalid.

**DSNU257I**  

csect-name UNABLE TO RESTART BUILD PHASE

Explanation: Restarting in the BUILD PHASE or the SORTBLD phase of the LOAD utility with the RESUME(YES) option is not permitted.

Severity: 8 (error)

System Action: Utility processing is not initiated.

User Response: Recover all indexes within the table space which were left in a rebuild pending state when the LOAD utility failed.

Problem Determination: Refer to DB2 Utility Guide and Reference and Section 2 (Volume 1) of DB2 Administration Guide for a discussion of LOAD restarting constraints.

**DSNU258I**  

csect-name BUILD PHASE STATISTICS. NUMBER OF INDEXES = mmm

Explanation: This message is issued at normal completion of the BUILD phase of the LOAD or REORG or REBUILD INDEX utility. The number of indexes that were updated is indicated as ‘mmm’.

Severity: 0 (informational)

System Action: The BUILD phase of either the LOAD or REORG or REBUILD INDEX utility is completed. Upon completion of the utility job step, they are available for REFERENCE processing.
**DSNU259I**  
㏄sect-name BUILD PHASE COMPLETE,  
ELAPSED TIME = hh:mm:ss  

**Explanation:** This message is issued at the normal completion of the BUILD phase of the REORG, LOAD, and REBUILD INDEX utilities. The time that has elapsed between the beginning of the phase and the completion of this phase was ‘hh’ hours, ‘mm’ minutes, and ‘ss’ seconds.

**System Action:** Processing continues to the next phase of the LOAD or REORG or REBUILD INDEX utility. If this is the last phase, processing continues to the next utility statement in the utility job step, if any.

---

**DSNU260I**  
㏄sect-name  

**Explanation:** This message is issued as a warning when REBUILD INDEX(ALL) or REORG TABLESPACE are executed on an empty table space.

This message is also issued when COPY detects that the first space map page in the table space or partition is missing. This is an error condition that might be caused by a delete and redefine of the data set outside of DB2, or by a previous DB2 failure that occurred on the data set.

**Severity:** 4 (warning) or 8 (error)

**System Action:** For REBUILD INDEX or REORG TABLESPACE, the return code of 4 will allow the next utility function in the job step, if any, to be initiated.

For COPY, the table space, index space, or partition being copied will be placed in recover pending status. The return code of 8 will prohibit further utility processing in the job step.

**User Response:** Notify the system programmer if the return code is 8. If the return code is 4, no action is required.

**System Programmer Response:** If the return code is 8, the table space, index space, or partition being copied should be recovered with the RECOVER utility.

---

**DSNU269I**  
㏄sect-name FIELD field-name IS NOT ALLOWED  

**Explanation:** You specified a ROWID GENERATED ALWAYS in the field specification list. Only a ROWID GENERATED BY DEFAULT is allowed to be specified in the field specification list.

Identity columns that were defined as GENERATED ALWAYS cannot be specified in a LOAD field specification list, nor can these columns be implied in LOAD FORMAT UNLOAD or LOAD with no field specification list.

**Severity:** 8 (error)

**System Action:** The LOAD utility is terminated

**User Response:** Omit the ROWID GENERATED ALWAYS column from the LOAD field specification list and rerun the job.

---

**DSNU270I**  
㏄sect-name - table-name, column-name IN VIOLATION OF INSTALLATION DEFINED FIELD PROCEDURE procedure-name, function-code, return-code, reason-code, message-token  

**Explanation:** An installation-supplied field procedure has returned an error during encoding for LOAD or decoding for REORG. See SQLCODE -682 for more detail.

**Severity:** 8 (error)

**System Action:** The utility will issue a system ‘04E’ abend with a reason code of ‘00E40336’.

**User Response:** Request the dump produced as a result of the error to the system programmer so that the cause of the error can be determined and corrected.

**System Programmer Response:** Examine the field procedure to determine why an error return code was generated. Refer to DB2 Utility Guide and Reference for more information.

---

**DSNU271I**  
㏄sect-name - REORG PENDING ON FOR TABLE SPACE database.index-name PART part number PROHIBITS PROCESSING  

**Explanation:** An attempt was made to execute a REORG utility to redistribute data in a partitioned table space. The partition number stated in this message was found to have the REORP state on, but was not specified on the PART n1:n2 parameter of the REORG utility.

# If you are running REORG to materialize identity column values, you must reorganize the entire table space.

**Severity:** 8 (error)

**System Action:** Utility processing is not initiated.

**System Programmer Response:** Identify the correct partition range specification for the REORG utility by issuing the DISPLAY command for the table space, and resubmit the utility job step.

---

**DSNU272I**  
㏄sect-name - FIELD PROCEDURE procedure-name COULD NOT BE LOADED  

**Explanation:** An installation supplied field procedure could not be loaded during encoding for LOAD or decoding for REORG. See SQLCODE -682 for more detail.

**Severity:** 8 (error)

**System Action:** The utility will terminate with a return code of 8.

**User Response:** Take the job output to the system programmer.

**System Programmer Response:** Determine why the field procedure could not be loaded.

---

**DSNU273I**  
㏄sect-name - REORG WITH SHRLEVEL REFERENCE OR CHANGE CANNOT APPLY TO TABLE SPACE name PARTITION n1:n2  

**Explanation:** REORG with SHRLEVEL REFERENCE or CHANGE cannot be used on table space partitions with REORG PENDING restrictive state.

**Severity:** 8 (error)

**System Action:** The REORG utility job is terminated.
User Response: Execute REORG with SHRLEVEL NONE against the partitions in REORG PENDING state to rebalance the partitions and remove the REORG PENDING state.

**DSNU2801**  
csect-name - ERROR=X’reason-code’ FROM EDIT ROUTINE procedure-name FOR table-name

Explanation: The edit routine provided by your installation has returned an error during the load of a record into the table indicated. The reason code is set by the edit routine.

Severity: 8 (error)

System Action: The LOAD or REORG utility will receive ABEND04E RC00E40323.

User Response: Correct any errors in the input data. Ensure that the edit routine provided is correct. The utility can be restarted or terminated.

System Programmer Response: Verify that the edit routine is correct.

**DSNU2811**  
csect-name RECORD (n) OF TABLE table-name VIOLATING VALID ROUTINE validproc-name, ERROR=X’reason-code’

Explanation: The validation exit routine provided by your installation blocked the load of record ‘n’ into TABLE ’table-name’. The reason-code was set by the exit routine.

Severity: 4 (warning)

System Action: The LOAD utility continues to process the following input record.

User Response: Check the error input records against the error reason code returned from the validation procedure. Refer to DB2 Utility Guide and Reference for a definition of LOAD input field column specifications.

System Programmer Response: Verify that the validation routine is correct.

**DSNU2821**  
csect-name UNABLE TO RESTART AT LAST CHECKPOINT WITH DDNAME ’dddddddd’

Explanation: The data set with DDNAME ‘dddddddd’ is a concatenated data set and the utility can be restarted only at the beginning of the phase (RESTART PHASE), not at the last checkpoint (RESTART CURRENT).

Severity: 8

System Action: The utility will issue a system ‘04E’ abend with a reason code of ‘00E40323’.

User Response: Change the RESTART option to RESTART PHASE and resubmit the job step.

Collect the following diagnostic items listed in Appendix B.  
“Problem determination” on page 1051 1, 2, 5.

**DSNU2881**  
csect-name REORG TABLESPACE dbname.tsname OFFPOSLIMIT SYSINDEXPART ROWS

Explanation: This is the header message for the SYSINDEXPART section of the REORG TABLESPACE OFFPOSLIMIT output. This section lists the SYSINDEXPART rows for the table space or table space partition as specified in the REORG TABLESPACE input statement. The fields from SYSINDEXPART are:

- CREATOR Index creator name
- IXNAME Index name
- CREATORT Table creator name
- TBNAMET Table name
- PART Partition number
- CARDF Number of rows referenced (floating point)
- FAROFFPOSF Number of rows referenced afar (floating point)
- NEAROFFPOSF Number of rows referenced nearby (floating point)
- STATSTIME TIMESTAMP of RUNSTATS update
- Rows which meet the OFFPOSLIMIT criteria are prefaced with ‘*’.

Severity: 0 (informational)

System Action: Processing continues normally

User Response: If the TIMESTAMP reported in the STATSTIME column is not recent, the OFFPOSLIMIT criteria might be evaluated with obsolete statistics.

**DSNU287I**  
csect-name REORG TABLESPACE dbname.tsname INDREFLIMIT SYSTABLEPART ROWS

Explanation: This is the header message for the SYSTABLEPART section of the REORG TABLESPACE INDREFLIMIT output. This section lists the SYSTABLEPART rows for the table space or table space partition as specified in the REORG TABLESPACE input statement. The fields from SYSTABLEPART are:

- DBNAME Database name
- TSNAME Table space name
- PART Partition number
- CARD Number of rows in table space
- FARINDREF Number of rows relocated afar
- NEARINDREF Number of rows relocated nearby
- STATSTIME TIMESTAMP of RUNSTATS update
- Rows which meet the INDREFLIMIT criteria are prefaced with ‘*’.

Severity: 0 (informational)

System Action: Processing continues normally

User Response: If the TIMESTAMP reported in the STATSTIME column is not recent, the INDREFLIMIT criteria might be evaluated with obsolete statistics.

**DSNU2881**  
csect-name REORG INDEX dbname ixname LEAFDISTLIMIT SYSINDEXPART ROWS

Explanation: This is the header message for the SYSINDEXPART section of the REORG INDEX LEAFDISTLIMIT output. This section lists the SYSINDEXPART rows for the index or index partition as specified in the REORG INDEX input statement. The fields from SYSINDEXPART are:

- CREATOR Index creator name
- IXNAME Index name
- PART Partition number
LEAFDIST: Number of pages between leaf pages multiplied by a factor.

STATSTIME: TIMESTAMP of RUNSTATS update.

Rows which meet the LEAFDISTLIMIT criteria are prefaced with a '*'.

Severity: 0 (informational)

System Action: Processing continues normally.

User Response: If the TIMESTAMP reported in the STATSTIME column is not recent, the LEAFDISTLIMIT criteria might be evaluated with obsolete statistics.

---

REORG LIMITS HAVE BEEN MET

Explanation: The REORG utility is indicating whether any specified limits have been met. For REORG TABLESPACE, this might be the OFFPOSLIMIT or the INDREFLIMIT. For REORG INDEX, this is the LEAFDISTLIMIT.

Severity: The return codes are:
1 (informational) If no limit is met.
2 (informational) If at least one limit is met.

System Action: Utility processing continues.

User Response: If the REPORTONLY option is specified and the result of this job step is not used to conditionally execute other job steps, examine the utility messages for this table space, partition, or index to determine if a REORG should be performed.

---

REORG WILL BE PERFORMED

Explanation: The REORG utility is indicating whether any specified limits have been met and whether a REORG will be performed. For REORG TABLESPACE, this might be the OFFPOSLIMIT or the INDREFLIMIT. For REORG INDEX, this is the LEAFDISTLIMIT.

Severity: 0 (informational)

System Action: Utility processing continues. A REORG is performed if any limits are met.

---

MAXIMUM COMPOSITE UNLOAD RECORD SIZE TOO LARGE FOR SORT. SORTDATA KEYWORD IS IGNORED.

Explanation: The SORTDATA keyword was specified for a REORG utility job. However, the largest possible record in the table space, prefixed by the largest key, produces a composite record that is too large to be processed by the SORT component. The SORTDATA keyword is ignored.

This message is issued by the following CSECT: DSNURFIT

Severity: 0

System Action: Processing continues normally.

User Response: If you must use SORTDATA for the table space, try reducing the size of either the largest record or key field by redefining the table. In some cases, changing a field from LONG VARCHAR to VARCHAR with a specified maximum length might help.

---

Problem Determination: This problem should only occur on a table space with a 32KB page size. Analyze the requirement for maximum data length in VARCHAR and LONG VARCHAR columns to see if a shorter length can be specified. It might be necessary to remove the SORTDATA keyword from the utility statement.

---

ALTER UTILITY CANNOT APPLY TO THIS UTILITY, REASON=csect-name

Explanation: The -ALTER UTILITY command only applies to a job that is executing REORG with SHRLEVEL REFERENCE or CHANGE. In addition, if -ALTER UTILITY specifies MAXRO, LONGLOG, or DELAY, the job must be executing REORG with SHRLEVEL CHANGE.

Severity: 8 (error)

System Action: -ALTER UTILITY does not execute.

User Response: Apply -ALTER UTILITY to a job that is executing the proper utility.

---

REORG WITH SHRLEVEL REFERENCE OR CHANGE CANNOT APPLY TO THE TABLE SPACE

Explanation: REORG with SHRLEVEL REFERENCE or CHANGE cannot operate on the following catalog and directory table spaces: DSNDB06.SYSDBASE, DSNDB06.SYSDBAUT, DSNDB06.SYSGROUP, DSNDB06.SYSPLAN, DSNDB06.SYSVIEWS, and DSNDB01.DBDO1.

Severity: 8 (error)

System Action: REORG does not execute.

User Response: Execute REORG with SHRLEVEL NONE.

---

LARGEST COMPOSITE RECORD IS TOO BIG FOR REORG WITH SHRLEVEL CHANGE

Explanation: SHRLEVEL CHANGE was specified for a REORG utility job, and the table has a clustering index. However, the largest possible record in the table space, prefixed by the largest key, produces a composite record that is too large to be processed by the SORT component. See the computation of the length under REORG in the DB2 Utility Guide and Reference. If the largest possible composite record to be sorted exceeds 32760 bytes in length, which is the maximum record size for a BSAM data set, REORG cannot operate if SHRLEVEL CHANGE is specified.

Severity: 8 (error)

System Action: REORG does not execute.

User Response: Execute REORG with SHRLEVEL NONE or REFERENCE. If you must use SHRLEVEL CHANGE for the table space, try reducing the size of either the largest record or key field by redefining the table. In some cases, changing a field from LONG VARCHAR to VARCHAR with a specified maximum length might help.
Problem Determination: This problem should only occur on a table space with a 32KB page size. Analyze the requirement for maximum data length in VARCHAR and LONG VARCHAR columns to see whether a shorter length can be specified.

**DSNU295I**  
*csect-name* - IN UTILTERM PHASE OF REORG WITH SHRLEVEL REFERENCE OR CHANGE, DATA SET name COULD NOT BE DELETED, DFP REASON CODE = rrrrrr

**Explanation:** For the area (table space or partition) being reorganized, REORG with SHRLEVEL REFERENCE or CHANGE unloads data from the original data sets and reloads data into shadow data sets. REORG then exchanges the names of the original and shadow data sets. The original name of a data set is in the form “catname.DSNDBx.dbname.psname.I0001.Annn.” The shadow name of a data set is in the form “catname.DSNDBx.dbname.psname.S0001.Annn.” REORG uses such data sets for indexes as well as data.

If a data set is DB2-managed, the utilterm phase of REORG deletes the shadow data set, which was the original data set. This message indicates that the shadow data set name could not be deleted. rrrrrr indicates the DFP reason code.

**Severity:** 4 (warning)

**System Action:** REORG continues execution, but it does not delete the specified data set.

**User Response:** Try to delete the data set. If you cannot delete it, notify the system programmer.

**System Programmer Response:** Look up the DFP reason code, and try to determine why the data set could not be deleted.

**DSNU296I**  
*csect-name* - IN REORG WITH SHRLEVEL REFERENCE OR CHANGE, DATA SET name DOES NOT EXIST, CONTEXT=SC

**Explanation:** For the area (table space or partition) being reorganized, REORG with SHRLEVEL REFERENCE or CHANGE unloads data from the original data sets and reloads data into shadow data sets. REORG then exchanges the names of the original and shadow data sets, using temporary names during the renaming. The original name of a data set is in the form “catname.DSNDBx.dbname.psname.I0001.Annn.” The shadow name of a data set is in the form “catname.DSNDBx.dbname.psname.S0001.Annn.” The temporary name of a data set is in the form “catname.DSNDBx.dbname.psname.T0001.Annn.” REORG uses such data sets for indexes as well as data.

During its initialization, REORG cannot execute if:
- data sets with the temporary names already exist
- DB2-managed data sets with the shadow names already exist
- user-managed data sets with the shadow names do not already exist

To exchange the names of the original and shadow data sets, REORG renames in the following ways:

1. In the switch phase, it renames the original data set from the original name to the temporary name
2. In the switch phase, it renames the shadow data set from the shadow name to the original name
3. In the utilterm phase, it renames the original data set from the temporary name to the shadow name (for user-managed data sets). It deletes the temporary name for DB2-managed data sets.

The context code indicates the specific type of error:

1. During the switch phase of REORG, on rename 1, REORG detected that a data set with an original name does not exist. This error condition can arise for a DB2-managed or user-managed data set.

2. During the switch phase of REORG, on rename 2, REORG detected that a data set with a shadow name does not exist. This error condition can arise for a DB2-managed or user-managed data set.

3. During the utilterm phase of REORG, on rename 3, REORG detected that a data set with a temporary name does not exist. This error condition can arise for a user-managed data set.

**Severity:** 4 (warning) or 8 (error)

**System Action:** For context codes 1 or 2, utility processing is abended. ABEND reason code 00E4031B is issued. The object is left in a recovery pending state. For context code 3, the utility job step that caused the function to be requested continues with no renaming. The utility job is placed in the stopped state. The object is left in a recovery pending state, and a message will be issued. For context codes 1, 2, or 3, the following messages are issued:

- If the data set is part of a nonpartitioned table space, the object is the table space, and the message is DSNU562I.
- If the data set is part of a partition of a table space, the object is the partition, and the message is DSNU560I.
- If the data set is part of a nonpartitioned index, the object is the index, and the message is DSNU577I.
- If the data set is part of a partitioned index, the object is the partition of the index, and the message is DSNU559I.

**User Response:** For context codes 1 or 2, execute the RECOVER TABLESPACE or RECOVER or REBUILD utilities. For context code 3 do nothing.
DSNU297I  csect-name COMPOSITE RECORD SIZE TOO LARGE FOR table-name

Explanation: The size of the record that would be unloaded for REORG DISCARD or REORG UNLOAD EXTERNAL is greater than the largest allowed data set logical record length (32760 bytes).

Severity: 8 (error)

System Action: The utility will terminate with a return code of 8.

User Response: If you are attempting to discard records during REORG, you will have to use SQL to DELETE the records prior to the REORG. If you are attempting to unload records in an external format, you will have to use an application.

Problem Determination: This problem will most likely occur only on a table with BLOB, CLOB, or DBCLOB columns.

DSNU298I  csect-name - RESTART NOT ALLOWED IN phase-name PHASE OF REORG UTILITY WITH SHRLEVEL CHANGE

Explanation: An attempt was made to restart the REORG utility with SHRLEVEL CHANGE in the phase-name phase. DB2 does not allow you to restart the REORG utility with SHRLEVEL CHANGE in that phase.

Severity: 8 (error)

System Action: Utility processing abends. Abend reason code 00E40018 or 00E40310 might be issued.

User Response: Issue the -TERM UTILITY command to terminate the utility job; then rerun the job without the RESTART parameter.

System Programmer Response: If necessary, take actions to prevent access to the table space or partition before terminating the utility.

DSNU299I  csect-name - COLUMN 'column-name' REQUIRES TRANSLATION FROM CCSID ccsid TO ccsid

Explanation: The LOAD utility was asked to translate an input value to a different coded character set, but the particular translation is not described in the SYSSTRINGS catalog table nor could translation be externalized. The first ccsid identifies the coded character set of the input value, and the second ccsid identifies the coded character set to which it must be translated.

Severity: 8 (error)

System Action: Further utility processing is terminated.

User Response: If the CCSIDs are correct, the only corrective action is to provide for the translation by inserting a row into SYSSTRINGS. For an SBCS translation, the row must contain a translate table or the name of a user-provided translate procedure. For a DBCS translation, the row must contain the name of a user-provided translate procedure.

If the CCSIDs are incorrect, correct the CCSID specification on the LOAD statement and resubmit the job.

DSNU300I  csect-name (RE)LOAD PHASE COMPLETE, ELAPSED TIME = hh:mm:ss

Explanation: The reload phase of the REORG or LOAD utility has completed normally. The elapsed time for the execution was 'hh' hours, 'mm' minutes, and 'ss' seconds.

DSNU301I  csect-name - KEYWORD 'SORTDATA' SPECIFIED BUT NO CLUSTERINGINDEX EXISTS, KEYWORD IS IGNORED

Explanation: The 'SORTDATA' keyword was specified or the 'NOSYSREC' keyword was specified for a REORG utility job, or implied by the use of SHRLEVEL CHANGE. But it was found that no clustering index existed for the table space being reorganized. The keyword is ignored and processing continues normally.

Severity: 0

System Action: Processing continues normally.

User Response: If a clustering index was expected to be found for the table space being reorganized, determine the reason the index could not be found.

Problem Determination: Probably a user error. Determine if a cluster index should be defined on one of the tables in the table space being reorganized. If so, define the cluster index; otherwise, remove the 'SORTDATA' and/or 'NOSYSREC' keyword from the utility statement if necessary.

DSNU302I  csect-name (RE)LOAD PHASE STATISTICS. NUMBER OF INPUT RECORDS PROCESSED = nnnnnnn

Explanation: This message is issued at the normal completion of the RELOAD phase of the REORG utility and the LOAD phase of the LOAD utility.

It indicates the number of records processed from the input record data set (that is, the data set identified either by the JCL DD statement identified in the UNLDDN option for REORG or the INDDN option for LOAD).

Severity: 0 (informational)

System Action: The LOAD or REORG utility completes the phase in which the records are (re-)introduced into the DB2 database. This is also the last phase of the utility unless there are some indexes that need to be built and/or updated.

User Response: The user can verify that the number of records (re)-loaded is consistent with expectations. For example, in REORG it matches the total number of records unloaded. For LOAD, it matches the number of records submitted minus the number of records reported rejected.

DSNU303I  csect-name (RE)LOAD PHASE STATISTICS. NUMBER OF RECORDS= nnnnnn FOR TABLE table-name PART=part-number

Explanation: This message is issued at the normal completion of the RELOAD phase of the REORG utility and the LOAD phase of the LOAD utility.

It indicates the number of records loaded into PART ‘part-number’ of ‘table-name’ from the source record data set. This data set is identified by the JCL DD statement in the UNLDDN option for REORG, or the INDDN option for LOAD.
This message is repeated for each INTO TABLE PART clause in the LOAD utility statement or each TABLESPACE PART clause in the REORG utility statement.

Severity: 0 (informational)

System Action: The LOAD or RELOAD phase maintains a separate count for each table part. Rejected rows are not included in the count. Each count is reported as a separate message at the end of the LOAD or RELOAD phase.

The user can verify the number of records loaded or reloaded into the table part. In REORG, it should match the number of records unloaded for that table part. In LOAD, it should match the number of records processed.

DSNU304I csect-name (RE)LOAD PHASE STATISTICS.
NUMBER OF RECORDS = nnnnnn FOR TABLE table-name

Explanation: This message is issued at the normal completion of the RELOAD phase of the REORG utility and the LOAD phase of the LOAD utility.

It indicates the number of records loaded into TABLE 'table-name' from the source record data set (that is, the data set identified by the JCL DD statement identified in the UNLDDN option for REORG, or the INDDN option for LOAD).

This message is repeated for each TABLE loaded by the current REORG or LOAD utility statement.

If the LOAD or REORG was restarted in a LOAD or RELOAD phase from the last commit point (i.e., the 'RESTART' parm was specified), 'nnnnnn' indicates the number of records loaded after the restart.

Severity: 0 (informational)

System Action: The LOAD or RELOAD phase maintains a separate count for each table populated by this phase. Rejected rows are not included in the count. Each count is reported as a separate message at the end of the LOAD or RELOAD phase.

The user can verify the number of records (re-)loaded into the table is consistent with expectations. For example, in REORG it matches the number of records unloaded for that table. For LOAD, it matches the number of records processed.

DSNU305I csect-name - TABLE=table-name HAS AN INCOMPLETE TABLE DEFINITION

Explanation: Table 'table-name' does not have an index defined to enforce the uniqueness of its primary key.

Severity: 8 (error)

System Action: Processing stops. No table in the table space is loaded.

User Response: The user can resubmit the LOAD job after either:
- Creating a unique index over the table's primary key
- Dropping the definition of the table's primary key.

Problem Determination: Issue SQL SELECT against the catalog to determine which indexes and relations exist against 'table-name'. Determine whether uniqueness of the primary key has been guaranteed through omission or through faulty definition of an index.

DSNU306I csect-name - UNABLE TO DRAIN WRITERS FROM object-type object-name

Explanation: The utility was unable to drain the writers from an object because the resource was unavailable. The object is identified by type and name. Message DSNT500I tells why the resource was unavailable. If the QUIESCE utility issues this message, DSNT500I is not issued, but message DSNT501I might be issued.

Severity: 8 (error)

System Action: Utility processing terminates.

Problem Determination: Refer to message DSNT500I or DSNT501I.

DSNU307I csect-name PARENT TABLE parent-table-name OF table-name IN RELATIONSHIP relationship-name HAS AN INCOMPLETE TABLE DEFINITION

Explanation: The 'table-name' identifies the target table of the job for the LOAD utility or the dependent table to be checked by the CHECK DATA utility. The 'parent-table-name' identifies the parent table of the target table for the LOAD utility or the dependent table for the CHECK DATA utility in RELATIONSHIP 'relationship-name'. The primary index of PARENT TABLE 'parent-table-name' has been dropped.

This message is repeated for each incompletely defined parent table in each relationship where the target table is a child.

Severity: 8 (error)

System Action: The LOAD and CHECK DATA utilities stop further processing. No data is loaded by the LOAD utility and no relationships are checked by the CHECK DATA utility.

User Response: Check the existence of the primary index and its parent tables identified by RELATIONSHIP 'relationship-name'.

Problem Determination: If the incompletely defined tables were targets of the LOAD job, message DSNU305I has been issued for each such table. Refer to the catalog to determine if any tables in the table space that were not targets of the LOAD job are incompletely defined.

DSNU308I csect-name INDEX KEY LIST RECORD LENGTH EXCEEDS MAXIMUM KEY BUFFER SIZE

Explanation: The length of the index key list that will be built in the Data Base Services address space while loading a data record may be larger than the maximum key buffer size. The LOAD statement may be too complex.

Severity: 8 (error)

System Action: Utility processing is terminated.

User Response: Examine the preceding DSNU650I INTO TABLE statements. The key size and number of indexes affected by each INTO TABLE statement are cumulative. The combination of these elements may produce a list of index keys, including header bytes, that is too large to be contained within the maximum size buffer area during the load of each input data record. It may be necessary to reduce the number of INTO TABLE statements or to drop some of the indexes that are affected by the load.
DSNU309I  csect-name NOT ALL REQUIRED UNIQUE INDEXES HAVE BEEN DEFINED FOR TABLE table-name

Explanation: The table 'table-name' was created with unique index requirements. Not all of these indexes have been defined.

Severity: 8

System Action: Processing stops. No table in the table space is loaded.

User Response: The user may resubmit the LOAD job after either:
- Creating all the required unique indexes, or
- Dropping the table and re-creating it without the unique index requirements.

Problem Determination: Determine which unique indexes need to be created. Determine if the uniqueness requirement for the table is valid.

DSNU310I  csect-name RECORD 'n' WILL BE DISCARDED DUE TO field-name CONVERSION ERROR FOR table-name

Explanation: The load utility found the input data provided for a field to be incorrect. The corresponding input data set record 'n' will be placed in the DISCARDS data set.

# If the NOSUBS keyword was specified, it is possible that the # record was discarded because the input contained a code # point that when translated from the source CCSID to the target # CCSID resulted in a substitution character being placed in the # target string.

Severity: 4 (warning)

System Action: The input data set record is noted and will be discarded in the DISCARD phase. The LOAD utility continues to process additional records in the input data set.

User Response: Following the completion of the current LOAD utility invocation, examine the record in the DISCARDS data set. Correct the error in the discarded input data. Submit a RESUME(YES) LOAD invocation, which uses the DISCARDS data set and the verified LOAD utility statement and field specifications. Refer to DB2 Utility Guide and Reference for a definition of LOAD input field column specifications.

System Programmer Response: Verify that the validation routine is correct.

DSNU311I  csect-name RECORD 'n' WILL BE DISCARDED DUE TO INVALID field-name COLUMN SPECIFICATION

Explanation: The load utility calculated the location of an input data value using the field specifications supplied and VARCHAR length fields present within the input data set record. The calculated position for the field was determined to be incorrect.

Severity: 4 (warning)

System Action: The input data set record number is noted and will be discarded in the DISCARD phase. The LOAD utility continues to process additional records in the input data set.

User Response: Following the completion of the current LOAD utility invocation, examine the record in the DISCARDS data set. Correct the error in the discarded input data. Submit a RESUME(YES) LOAD invocation, which uses the DISCARDS data set and the verified LOAD utility statement and field specifications. Refer to DB2 Utility Guide and Reference for a definition of LOAD input field column specifications.

System Programmer Response: Verify that the validation routine is correct.

DSNU312I  csect-name RECORD 'n' WILL BE DISCARDED DUE TO ERROR = X'reason-code' FROM EXIT ROUTINE procedure-name FOR table-name

Explanation: The exit routine provided by your installation blocked the load of record 'n' into the table indicated. The reason-code was set by the exit routine.

Severity: 4 (warning)

System Action: The input data set record number is noted and will be discarded in the DISCARD phase. The LOAD utility continues to process additional records in the input data set.

User Response: Following the completion of the current LOAD utility invocation, examine the record in the DISCARDS data set. Correct the error in the discarded input data, if one exists. Ensure that the exit routine provided is correct. Submit a RESUME(YES) LOAD invocation, which uses the DISCARDS data set and the verified LOAD utility statement and field specifications. Refer to DB2 Utility Guide and Reference for a definition of LOAD input field column specifications.

System Programmer Response: Verify that the validation routine is correct.

DSNU313I  csect-name RECORD 'n' WILL BE DISCARDED DUE TO PART OR HIGH KEY VALUESPECIFICATION(S)

Explanation: The discarded record does not belong to any of the partitions being loaded. For a LARGE table space, this might be because the key is higher than the high key value specified for the last partition.

Severity: 4 (warning)

System Action: The input data set record number is noted and will be discarded in the DISCARD phase. The LOAD utility continues to process additional records in the input data set.

User Response: Following the completion of the current LOAD utility invocation, examine the record in the DISCARDS data set. Correct the error in the discarded input data, if one exists. Submit a RESUME(YES) LOAD invocation with the DISCARDS data set as the input data set. Refer to Section 2 of DB2 Utility Guide and Reference for a definition of LOAD input field column specifications.

System Programmer Response: Verify that the validation routine is correct.

DSNU314I  csect-name RECORD 'n' WILL BE DISCARDED DUE TO WHEN SPECIFICATION(S)

Explanation: The discarded record satisfies none of the WHEN selection expressions provided.

Severity: 4 (warning)

System Action: The input data set record number is noted and will be discarded in the DISCARD phase. The LOAD utility continues to process additional records in the input data set.

User Response: Following the completion of the current LOAD utility invocation, examine the record in the DISCARDS data set. Correct the error in the discarded input data, if one exists. Submit a RESUME(YES) LOAD invocation with the DISCARDS data set as the input data set. Refer to DB2 Utility
**DSNU315I** csect-name RECORD 'n' WILL BE DISCARDED DUE TO UNEXPECTED ERROR

**Explanation:** The LOAD of input data set record number 'n' was attempted but was not successful due to an unexpected error.

**Severity:** 8 (error)

**System Action:** If the error was caused because a resource was not available, a DSNT500I message will be issued. The utility step will be abended with a system X'04E' and an abend reason code of '00E40318'. If a DSNT500I message is not issued, an SVC dump will be requested. A SYSABEND dump of batch storage is also requested.

**User Response:** If a DSNT500I message was issued, refer to the description under that message number. If the unavailable resource becomes available, the utility step is restartable.

**Operator Response:** An operator with SYSOPR authority can issue a TERM UTIL to free any held resources if that is necessary.

**System Programmer Response:** Refer to DB2 Command Reference for information about the TERM UTIL command. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** See user response.

---

**DSNU318I** csect-name RECORD 'n' WILL BE DISCARDED DUE TO INVALID field-name COLUMN SPECIFICATION FOR table-name

**Explanation:** The load utility calculated the location of an input data value using the field specifications supplied and VARCHAR length fields present within the input data set record 'n'. The calculated position for the field was determined to be incorrect.

**Severity:** 4 (warning)

**System Action:** The input data set record number is noted and will be discarded in the DISCARD phase. The LOAD utility continues to process additional records in the input data set.

**User Response:** Following the completion of the current LOAD utility invocation, examine the record in the DISCARDS data set. Correct the error in the discarded input data, if one exists. Otherwise, correct the input field specification. Submit a RESUME(YES) LOAD invocation, which uses the DISCARDS data set and the verified LOAD utility statement and field specifications. Refer to DB2 Utility Guide and Reference for a definition of LOAD input field column specifications.

**Problem Determination:** See user response.

---

**DSNU319I** csect-name RESUME(YES) WAS SPECIFIED FOR EMPTY PARTITION nn. RESUME(NO) IS ASSUMED

**Explanation:** This message is issued in response to a LOAD utility request containing a partition level RESUME(YES) option. The RESUME(YES) option implies that the specified partition 'nn' is populated, but in this case it was not. The message alerts the invoker to this fact, and continues as if RESUME(YES) was not specified.

**Severity:** 4 (warning)

**System Action:** The LOAD utility, in attempting to honor the RESUME(YES), found the partition was empty, ignored the option, and continued as if RESUME(NO) was specified.

**User Response:** The user is alerted to the fact that the requested partition was empty rather than populated as the RESUME LOAD option implied.

---

**DSNU320I** csect-name RESUME(YES) WAS SPECIFIED FOR AN EMPTY TABLESPACE

**Explanation:** RESUME(YES) was specified within the LOAD utility statement. However, the RESUME(YES) option implies that the specified table space is populated.

**Severity:** 4 (warning)

**System Action:** Processing continues. The LOAD utility, in attempting to honor the RESUME(YES), found the table space empty, so ignored the option, and proceeded as if RESUME(NO) was specified. If this table is currently defined as COMPRESS YES, a dictionary is not built.

**User Response:** The user is alerted to the fact that the requested table space was empty rather than populated as the RESUME LOAD option implied. Use the RESUME(NO) option if you want a compression dictionary built.
**DSNU321I**  
`csect-name CHECK PENDING STATE OF TABLESPACE tsp PROHIBITS PROCESSING`  
**Explanation:** The requested utility cannot be run against a table space or table space partition in a check pending state.  
**Severity:** 8 (error)  
**System Action:** Processing terminates after the check pending states of all target table spaces or partitions of the utility are analyzed.  
**User Response:** Remove the named table space or partition from its check pending state by using the CHECK DATA or REPAIR utility. If you want more information on the extent of questionable data in the table space, query the SYSTABLES and SYSTABLEPART catalog tables.

**DSNU322I**  
`csect-name DEFERRED STATUS OF TABLESPACE database-name.table-space-name PROHIBITS PROCESSING`  
**Explanation:** The requested utility cannot be run against a table space or table space partition in a deferred state.  
**Severity:** 8 (error)  
**System Action:** Processing terminates after the deferred state of all target table spaces or table space partitions of the utility are analyzed.  
**User Response:** To remove the deferred state, use the RECOVER TABLESPACE, LOAD REPLACE utility, or -START DATABASE command with ACCESS(RW) or ACCESS(RO). If you want more information on the status of the table space, use the -DISPLAY DATABASE command.

**DSNU323I**  
`csect-name COLUMN ccc IS OMITTED`  
**Explanation:** The column ‘ccc’ is a nonnullable column and is not being loaded. Field specifications must include all nonnullable columns. The identified column name was missing from the field specification.  
**Severity:** 8 (error)  
**System Action:** Further utility processing is terminated.  
**User Response:** Determine if the input data contains the nonnullable column as a field. If it does, change the field specification to include it. If the input data does not contain the nonnullable column as a field, determine which is in error, the input data or the column specification. Make the corresponding correction. Resubmit the job if that is still appropriate.  
**System Programmer Response:** Corrective procedures may require that a table be dropped and created again. Refer to Section 2 (Volume 1) of *DB2 Administration Guide* for a discussion of how this can be accomplished. Refer to *DB2 Utility Guide and Reference* for a discussion of field specification constraints with regard to nonnullable columns.

**DSNU324I**  
`csect-name DEFERRED STATUS OF INDEX SPACE creator-name.index-name PROHIBITS PROCESSING`  
**Explanation:** The requested utility cannot be run against an index space or index space partition in a deferred state.  
**Severity:** 8 (error)  
**System Action:** Processing terminates after the deferred state of all target index spaces or index partitions of the utility are analyzed.

**DSNU325I**  
`csect-name - AN INVALID SQL/DS FORMAT RECORD WAS ENCOUNTERED`  
**Explanation:** The LOAD utility detected an invalid SQL/DS format record type.  
**Severity:** 8 (error)  
**System Action:** Utility execution is terminated.  
**User Response:** Correct the input data and resubmit the job. Data that has been transmitted from an SQL/DS unload disk data set in a VM/370 system may have extra block descriptors and record descriptors at the beginning of each record. Ensure that this situation does not exist.  
**Problem Determination:** Refer to Section 2 (Volume 1) of *DB2 Administration Guide* for additional information regarding loading data from SQL/DS and resubmitting a partially completed load step.

**DSNU326I**  
`csect-name - USER NOT AUTHORIZED FOR LOAD REPLACE ON TABLESPACE`  
**Explanation:** The indicated user attempted to use the REPLACE option of LOAD, and it will reset to empty all tables in the table space before loading data. This option requires load authorization on each table in the table space, but the user did not have authority for one or more tables.  
**Severity:** 12 (severe error)  
**System Action:** When LOAD REPLACE validation encounters the first nonauthorized table in the table space, the job step is terminated.  
**User Response:** Obtaining the LOAD on DATABASE privilege for the database will allow you to proceed using the REPLACE option. The other alternative is to first delete all rows from the tables which are to be loaded, and then use the RESUME option instead of the REPLACE option.

**DSNU327I**  
`csect-name TABLE b IS NOT IN SAME TABLESPACE AS TABLE a`  
**Explanation:** All tables that are the subject of a single LOAD utility statement must belong to the same table space.  
**Severity:** 8 (error)  
**System Action:** Further utility processing is terminated.  
**User Response:** Remove the INTO TABLE control statement that specifies TABLE ‘b’ from the current LOAD request. If the data is to be loaded into TABLE ‘b’, create another LOAD utility statement that contains the INTO TABLE control statement for TABLE ‘b’ and resubmit the job.
**DSNU328I**  csect-name CANNOT PROCESS THE NON-EMPTY PARTITION 'nn' WITH RESUME(NO). PROCESSING TERMINATES

**Explanation:** The partition level RESUME keyword either specified or defaulted to a value of NO, which requires the partition to be empty. However, the LOAD command named partition 'nn', which was not empty.

**Severity:** 8 (error)

**System Action:** Further utility processing is terminated.

**User Response:** Determine why the assumption of an empty partition was wrong. This may require consultation with the system programmer. Either remove the current partition's rows using an SQL DELETE, or change the LOAD option to RESUME YES. Resubmit the job. Refer to DB2 Utility Guide and Reference for a description of the partition-level RESUME option of LOAD.

**System Programmer Response:** Determine whether the field specification is consistent with the table definition and the input data. This may require consultation with the system programmer. Either remove the current partition's rows using an SQL DELETE, or change the LOAD option to RESUME YES. Resubmit the job. Refer to DB2 Utility Guide and Reference for a definition of the LOAD FORMAT option.

**DSNU329I**  csect-name - FIELD field-name IS NOT DEFAULTABLE

**Explanation:** You specified a NULLIF or DEFAULTIF field specification option for:
- A column defined to be not nullable or not defaultable
- A field with no column counterpart.

**Severity:** 8 (error)

**System Action:** The utility abends to allow restart.

**User Response:** Determine whether the field specification refers to the correct column. If it does, remove the NULLIF option from the field specification, and restart the job. Alternatively, TERM the utility. Refer to DB2 Utility Guide and Reference for LOAD NULLIF option constraints.

**DSNU330I**  csect-name - TABLESPACE IS NOT EMPTY

**Explanation:** The RESUME keyword either specified or defaulted to a value of 'NO', which requires an empty table space. However, the LOAD command named a table space that was not empty.

**Severity:** 8 (error)

**System Action:** Further utility processing is terminated.

**User Response:** Determine why the assumption of an empty table space was wrong. This may require consultation with the system programmer. Either remove the current table(s) rows using an SQL DELETE, or change the LOAD option to RESUME YES. Resubmit the job. Refer to DB2 Utility Guide and Reference for a definition of the RESUME option of LOAD.

**System Programmer Response:** If the table space is used by more than one application, determine whether the table space should be empty. If it should be, use SQL DELETE to make it empty. Otherwise, instruct the user to use the RESUME(YES) option.

**DSNU331I**  csect-name  FIELD LISTS ARE NOT ALLOWED WITH FORMAT KEYWORD

**Explanation:** LOAD field specifications are incompatible with the FORMAT option.

**Severity:** 8 (error)

**System Action:** Further utility processing is terminated.

**User Response:** Determine whether the field specifications or the FORMAT option is correct. Eliminate whichever is incorrect, and resubmit the job. Refer to DB2 Utility Guide and Reference for a definition of the LOAD FORMAT option constraints.

**DSNU332I**  csect-name - INPUT VALUE X'hex-data' OUT OF RANGE FOR COLUMN ‘column-name’

**Explanation:** The LOAD utility detected a numeric value outside of the range of permissible values for the column in the DB2 table. A loss of significant digits results if the LOAD process continues. The input data type is SMALL INTEGER, INTEGER, DECIMAL, or FLOAT and is displayed in hexadecimal.

**Severity:** 8 (error)

**System Action:** Further utility processing is terminated unless DISCARD processing is active.

**User Response:** Correct the input data and resubmit the job. Make sure that the 'field specification' on the LOAD statement is consistent with the table definition and the input data. This might mean changing:
- The table definition
- The LOAD statement
- The input data.

Refer to DB2 Utility Guide and Reference to determine input constraints. Refer to Section 2 (Volume 1) of DB2 Administration Guide for information on resubmitting a partially completed LOAD step.

**DSNU333I**  csect-name - INPUT VALUE 'ebcdic-data' OUT OF RANGE FOR COLUMN ‘column-name’

**Explanation:** The LOAD utility detected a numeric value outside the range of permissible values for the column in the DB2 table. A loss of significant digits results if the LOAD process continues. The input data type is INTEGER EXTERNAL, DECIMAL EXTERNAL, or FLOAT EXTERNAL.

**Severity:** 8 (error)

**System Action:** Further utility processing is terminated.

**User Response:** Correct the input data and resubmit the job. Make sure that the 'field specification' on the LOAD statement is consistent with the table definition and the input data. This might mean changing:
- The table definition
- The LOAD statement
- The input data.

Refer to DB2 Utility Guide and Reference to determine input constraints. Refer to Section 2 (Volume 1) of DB2 Administration Guide for information on resubmitting a partially completed LOAD step.
**DSNU334I**  
**csect-name INPUT FIELD ffffffff INVALID FOR tttttttt, ERROR CODE cc**  

**Explanation:** The LOAD utility found the input data provided for field ffffffff in table tttttttt to be incorrect. The error code cc, if present, identifies the problem. Possible error codes are:

01 Input numeric value is out of the range for the table column.
02 Input numeric field contains invalid numeric data.
03 There was an error converting input numeric data to floating-point data.
04 Input packed decimal data is in error.
05 Input is too long for a date column.
06 Input is too short for a date column.
07 Input is too long for a time column.
08 Input is too short for a time column.
09 Input is too long for a time stamp column.
10 Input is too short for a time stamp column.
11 Input character field is too long for the table column.
12 Input variable character field is too long for the table column.
13 Input is out of range for the date/time column.
14 Input is invalid for the date/time column.
15 Input length is incorrect for numeric column.
16 Input contains a blank character.
17 Input is too long for a graphic column.
18 Input is invalid for a graphic column.
19 Input is too long for the table column after a required CCSID conversion.
20 Input contained an invalid code point for a required CCSID conversion.
21 Input does not conform to the rules for valid data for a required CCSID conversion.
22 Input causes an error during CCSID conversion. An example of this type of error would be an error in a user exit routine.
23 Input is invalid for a rowid column.
24 Input contained a code point that when translated from the source CCSID to the target CCSID resulted in a substitution character being placed in the target string.
25 The range of values for an identity column is exhausted.

**Severity:** 8 (error)  
**System Action:** Further utility processing is terminated.  
**User Response:** Correct the input data and resubmit the job. Make sure that the ‘field specification’ on the LOAD statement is consistent with the table definition and the input data. This might mean changing:

- The table definition
- The LOAD statement
- The input data.

Refer to DB2 Utility Guide and Reference to determine input constraints. Refer to Section 2 (Volume 1) of DB2 Administration Guide for information on resubmitting a partially completed LOAD step.

**DSNU335I**  
**csect-name INPUT FIELD ‘fffffff’ NOT ENTIRELY WITHIN INPUT RECORD**  

**Explanation:** The LOAD utility found that the input field ‘fffffff’ extends beyond the end of the input record.

If DISCARDS processing is active, the message severity is 4 (warning).

**Severity:** 4 (warning) or 8 (error)

**System Action:** For fixed length records, with no VARCHARs included, the length needed by the LOAD utility can be calculated before processing. In this case, when the LOAD utility determines that no records can be loaded because ALL of the INTO TABLE statements require input longer than the defined lengths, the LOAD job terminates on the first record without discarding any records. Further utility processing with mixed or non-fixed length records is terminated unless DISCARDS processing is active.

**User Response:** Correct the input data and resubmit the job. Make sure that the ‘field specification’ on the LOAD statement is consistent with the table definition and the input data. This might mean changing:

- The table definition
- The LOAD statement
- The input data.

Refer to DB2 Utility Guide and Reference to determine input constraints. Refer to Section 2 (Volume 1) of DB2 Administration Guide for information on resubmitting a partially completed LOAD step.

**DSNU336I**  
**csect-name INVALID nullif SPECIFICATION FOR INPUT FIELD ffffffff**  

**Explanation:** The LOAD utility found the ‘nullif’ field specification to be incorrect.

**Severity:** 8 (error)

**System Action:** Further utility processing is terminated.

**User Response:** Correct the ‘nullif’ specification and resubmit the job. Refer to DB2 Utility Guide and Reference for a description of ‘nullif’ field selection options and Section 2 (Volume 1) of DB2 Administration Guide for information on resubmitting a partially completed LOAD step.

**DSNU337I**  
**csect-name RECORD(n), CONCATENATED CONTINUEIF RECORD IS TOO LARGE**  

**Explanation:** The CONTINUEIF option was specified during LOAD to concatenate multiple physical records into one logical record for loading. The resultant concatenated record is too large to be processed. The maximum length allowed is 32767 bytes.

**Severity:** 8

**System Action:** When discard processing is specified, the input data set logical record is noted and will be discarded in the DISCARD phase. The LOAD utility continues to process additional records in the input data set, and the severity level is 4. When discard process is not specified, the severity is 8 and the LOAD utility will terminate.
User Response: When discard processing is specified, following the completion of the current LOAD utility invocation, examine the record in the DISCARDS data set. Correct the error in the discarded input data, and submit a RESUME=YES LOAD invocation with the DISCARDS data set as the input data set. When discard processing is not specified: correct the error in the input data set and rerun the job.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items: Appendix B, “Problem determination” on page 1051, 1, 2, 5.

DSNU338I csect-name INVALID COLUMN SPECIFICATION FOR column name
Explanation: The LOAD utility found the dynamically determined column location for an input field to be incorrect.
Severity: 8 (error)
System Action: The utility abends to allow restart.
User Response: Correct the input field specification or the input data and restart the job. Alternatively, TERM the utility.

DSNU339I csect-name INVALID CONTINUEIF SPECIFICATION
Explanation: The CONTINUEIF clause of a LOAD utility extends beyond the end of the input record.
Severity: 8 (error)
System Action: The LOAD utility is terminated.
User Response: Correct the CONTINUEIF clause. The column specification must be reduced and/or the value being compared must be shortened. The value being compared must be entirely within the input record.

DSNU340I csect-name - ERROR LOADING INDEX, DUPLICATE KEY, INDEX=index-name, TABLE=table-name, RID OF INDEXED ROW=rid-of-indexed-row, RID OF NON-INDEXED ROW=rid-of-non-indexed-row
Explanation: A duplicate key was found while building the indicated index during the BUILD phase of the REORG or REBUILD INDEX utility. This violates the uniqueness rule for that index.
Severity: 8 (error)
System Action: All duplicate index entries of the indicated index are reported and the index is in RECOVERY PENDING status. Duplicate rows are present in the indexed table. Utility processing continues with any other utility functions within the utility job step.
User Response: Duplicate rows are present in the indexed table. The system programmer should be informed, so that any applications that are dependent upon the uniqueness of the table rows are not initiated until corrective action has been taken.
Operator Response: Notify the system programmer.
System Programmer Response: Steps should be taken to inhibit any further processing until the index is repaired. If the nonunique keys are correct, DROP and recreate the index as nonunique. If the records with duplicate keys should not be in the table, use REPAIR DELETE to remove the erroneous rows. Use the RID values provided in this message as input to the REPAIR utility. After the duplicate data rows are removed or the unique index has been dropped, issue the DISPLAY DATABASE command with RESTRICT against the target database. Use the REBUILD INDEX utility to recover any indexes that are in the REBUILD pending state. CHECK INDEX can be run to verify that the data and indexes are consistent.

Problem Determination: Use REPAIR LOCATE RID DUMP to view the records with duplicate keys. SQLSELECT may fail due to the inconsistent index. Use CHECK INDEX to check the validity of the index.

DSNU341I csect-name - IMAGE COPY MUST BE TAKEN BEFORE REORG CAN BE RUN ON A DB2 CATALOG OR DIRECTORY TABLE SPACE
Explanation: The DB2 catalog or directory table space being reorganized does not have an image copy that the RECOVER utility can use to recover the table space to currency. Before running the REORG utility, you must run the COPY utility to create an image copy. This prevents having to recover the DB2 catalog or directory table space to a prior point in time if a problem occurs during REORG processing.
Severity: 8
System Action: Processing terminates
User Response: Run the COPY utility to create an image copy of the DB2 catalog or directory table space. If more than one catalog or directory table space is to be reorganized, consider using the QUIESCE and COPY utilities for the set of table spaces to be reorganized.
Use the REPORT utility to view the recovery information related to the table space. The output from the REPORT utility should indicate either the absence of an image copy, or the presence of a REORG LOG NO SYSCOPY record.

DSNU342I csect-name - ERROR LOADING INDEX, ERROR = Xreason-code, INDEX = index-name
Explanation: The LOAD, REORG or REBUILD INDEX utility encountered a processing error, which it could not correct, while extending the index identified by ‘index-name’. Refer to “Section 4. DB2 Codes” on page 577 for an explanation of the code given in ‘reason-code’.
Severity: 8 (error)
System Action: The building of index entries for the indicated index is not completed. An SVC dump of the database services address space is requested for diagnostic purposes. The extension of other indexes associated with the tables being loaded is attempted. Any subsequent attempt to use the index directly or indirectly will cause the invoker to abend.
User Response: If the indexed table is used by more than one application, the system programmer should be informed so that applications that insert rows into, or delete rows from, the table or use the index directly are inhibited until corrective action is taken.
Normal corrective action would be to use the REBUILD INDEX utility option to reconstruct the index after the processing problem identified by the reason code has been resolved. Alternatively, the index can be dropped and then created again, unless the index in question is the partitioning index.
Operator Response: The table space in question might need to be stopped and started for utility-only processing to inhibit attempted application use of the defective index.

System Programmer Response: If the index is used by more than one application, applications that either insert rows into, or delete rows from, the indexed table or use the index to access rows must be inhibited from executing. One way to accomplish this is to place the table space in question under utility only processing control via the -START and -STOP DATABASE commands until the REBUILD INDEX utility is executed.

Alternatively, the index can be dropped. Application execution can then proceed, and the index can be created again (unless the index was the partitioning index). If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem. Refer to “Section 4. DB2 Codes” on page 577 to determine the processing error indicated by the reason code. For a discussion of how a table can be dropped and created again, or what to do if a partitioning index is damaged, refer to the discussion of LOAD processing in Section 2 (Volume 1) of DB2 Administration Guide.

---

**DSNU343I  csect-name - BUILD PHASE STATISTICS. nnn DUPLICATE KEY ERRORS ENCOUNTERED**

Explanation: The count of duplicate key errors encountered during processing is 'nnn'.

Severity: 4 (warning) or 8 (error)

System Action: Processing continues. For the LOAD utility, the records causing the duplicate key errors will be deleted in a subsequent phase.

---

**DSNU344I  csect-name - UNIQUE INDEX KEY DUPLICATES KEY OF INDEXED ROW AT RID rrr INDEX = index-name TABLE = table-name RECNO = input-dataset-record-number RID = duprid**

Explanation: The input data set record indicated was loaded into table 'table-name' at RID 'duprid', but it causes a unique index violation for index 'index-name'. It duplicates the key value of a record already in the table at RID 'rrr'.

Severity: 4 (warning)

System Action: Processing continues. No index entry is created for the record at RID 'duprid'. The record will be deleted in a subsequent phase of processing.

---

**DSNU345I  csect-name UNIQUE INDEX KEY DUPLICATES KEY FROM INPUT DATASET RECORD iiiii LOADED AT RID rrr INDEX = index-name TABLE = table-name RECNO = recno RID = duprid**

Explanation: Input data set record 'recno' was loaded into table 'table-name' at RID 'duprid', but it causes a unique index violation for index 'index-name'. It duplicates the key value of another record in the load job: the record loaded at RID 'rrr' from input data set record 'iii'.

Severity: 4 (warning)

System Action: Processing continues. Index entries are not created for either record. Both records will be deleted in a subsequent phase of processing.

---

**DSNU346I  csect-name RECORD(n), CONCATENATED SQL/DS RECORD IS TOO LARGE**

Explanation: A LOAD utility was executing with FORMAT SQL/DS input data. Multiple spanned segments of the input data were concatenated into one logical record for loading. The resultant concatenated record is too large to be processed. The maximum length allowed is 32764 bytes.

Severity: 4 or 8

System Action: When discard processing is specified, the input data set logical record is noted and is discarded in the DISCARD phase. The LOAD utility continues to process additional records in the input data set and the severity is 4. When discard processing is not specified, the severity is 8 and the LOAD utility terminates.

User Response: When discard processing is specified, examine the records in the DISCARDS data set after the LOAD utility completes. Correct the error in the discarded input data. Then run the LOAD utility with the RESUME YES option using the DISCARDS data set as input. When discard processing is not specified, correct the error in the input data set and rerun the job.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on Page 1051, 1, 2, 5.

---

**DSNU347I  csect-name DEADLINE = yyyy-mm-dd-hh.mm.ss.mmmmmm**

Explanation: This message applies only to REORG with SHRLEVEL REFERENCE or CHANGE. It supplements message DSNU105I, which can appear for any utility (including REORG).

This message is issued in response to a -DISPLAY UTILITY command.

It is also issued by the REORG utility if the user specified SHRLEVEL REFERENCE or CHANGE and DB2 estimates that the switch phase will not start by the deadline specified by the DEADLINE phrase.

This message indicates the most recently specified values of the DEADLINE parameter to REORG. For this parameter, a previous invocation of the -ALTER UTILITY command might have specified a value. If no previous invocation of -ALTER UTILITY has specified a value, then the most recently specified value is the value that was specified with the invocation of the REORG utility.

'yyyy-mm-dd-hh.mm.ss.mmmmmm' indicates a timestamp, according to the most recently specified value of DEADLINE.

Severity: 0 (informational)

System Action: The message reflects the state of DB2 at the time of the -DISPLAY UTILITY command or the time when DB2 estimated that the switch phase would not start by the deadline specified by the DEADLINE phrase.

If this message was issued for -DISPLAY UTILITY, the system continues processing. If an -ALTER UTILITY command is then executed, a subsequent -DISPLAY UTILITY command would reflect the results (if any) of the -ALTER UTILITY command.

---
**DSNU348I** csect-name BUILD PHASE STATISTICS.
NUMBER OF KEYS = nnnnnnnn FOR index-name PART part-num

**Explanation:** This message is issued by the BUILD phase of the REBUILD INDEX utility to report the total number of index key entries used to build the indicated index partition.

**Severity:** 0 (informational)

**System Action:** This message indicates the number of index key entries submitted to the DB2 data manager to build the indicated index partition. Both unique and nonunique key entries are counted. Rejected key entries are not counted.

**User Response:** The user can verify that the number reported is consistent with expectations.

**DSNU349I** csect-name BUILD PHASE STATISTICS.
NUMBER OF KEYS = nnnnnnnn FOR index-name

**Explanation:** This message is issued by the BUILD phase of the LOAD, REORG or REBUILD INDEX utility. The message is repeated for each index built by the LOAD, REORG or REBUILD INDEX utility. It indicates the total number of index key entries used to build the indicated index.

**Severity:** 0 (informational)

**System Action:** This message indicates the number of index key entries that were submitted to the DB2 data manager to build the indicated index. Both unique and nonunique key entries are counted. Rejected key entries are not counted.

**User Response:** The user can verify that the number reported is consistent with expectations. For example, the user can determine if it matches the number of records loaded for the table indexed by the indicated index.

**DSNU350I** csect-name - EXISTING RECORDS DELETED FROM TABLESPACE

**Explanation:** A LOAD utility execution, in which REPLACE was specified, has deleted all records from the specified table space.

**Severity:** 0 (informational)

**System Action:** Processing continues.

**DSNU351I** csect-name - 'reorg-option' OPTION IS NOT APPLICABLE FOR A DB2 CATALOG OR DIRECTORY TABLE SPACE. THE OPTION IS IGNORED.

**Explanation:** The identified option does not apply when reorganizing one of the following DB2 catalog or directory table spaces:

- DSND06.SYSDBASE
- DSND06.SYSDBAUT
- DSND06.SYSGROUP
- DSND06.SYSPLAN
- DSND06.SYSVIEWS
- DSND01.DB01

These table spaces are processed differently than other table spaces and, consequently, do not make use of the specified reorg-option.

**Severity:** 4 (warning)

**DSNU352I** EXISTING RECORDS DELETED FROM TABLESPACE PARTITION x

**Explanation:** A LOAD utility execution, in which PART 'x' REPLACE was specified, has deleted all data records from partition 'x'. Index records over partition 'x' will be deleted in a subsequent phase of processing.

**Severity:** 0 (informational)

**System Action:** Processing continues.

**DSNU353I** csect-name RECORD 'n' WILL BE DISCARDED DUE TO CHECK CONSTRAINT constraint-name VIOLATION ON TABLE table-name

**Explanation:** The discarded record violates the check constraint named constraint-name defined on table table-name. The record is not loaded and is discarded during the DISCARD phase.

**Severity:** 4 (warning)

**System Action:** The LOAD utility continues to process additional records in the input data set.

**User Response:** After the LOAD utility completes, examine the record in the DISCARDS data set. Correct the error in the discarded input data. Submit a RESUME(YES) LOAD job with the DISCARDS data set as the input data set.

**DSNU354I** csect-name RECORD 'n' VIOLATES CHECK CONSTRAINT constraint-name ON TABLE table-name

**Explanation:** The LOAD utility cannot load record n into table table-name because the check constraint constraint-name would be violated. The record is not loaded.

**Severity:** 8 (error)

**System Action:** Processing terminates. An abend is requested so that the LOAD can be restarted after the error condition is corrected.

**User Response:** Find the failing record in the input data set, correct the condition that caused the check constraint to be violated, and restart the LOAD utility. You can optionally include a SYSDISC DD statement in the JCL input to hold copies of records that are not loaded.

**DSNU355I** csect-name INDEXVAL PHASE STATISTICS - mnn DUPLICATE KEY ERRORS CORRECTED BY DELETING mr DATA ROWS

**Explanation:** This message reports the results of the INDEXVAL phase of the LOAD utility. Data rows which were added during the LOAD or RELOAD phase of this LOAD utility invocation have been deleted because they caused unique index violations in the BUILD phase. A total of 'mr' data rows were deleted to correct 'mnn' unique index violations.

Unique index violations are counted in one of two ways. An input data set record which has a value for a uniquely indexed column that duplicates a value that existed in the index prior to the LOAD job is counted as one duplicate key error. Two input
data set records which have like values for a uniquely indexed column are counted as two unique index errors (that is, each of the two input data set records is in error).

Severity: 4 (warning)
System Action: Processing continues.
User Response: Compare the number of duplicate key errors detected in the INDEXVAL phase to the number of duplicate key errors detected in the BUILD phase (reported by message DSNU343I). If the counts are unequal, notify the system programmer.

If the counts are equal, following the LOAD utility execution, examine the discards file or the LOAD error summary to determine which input data set records caused the unique index violations. Revise the input records so they will not introduce duplicate values into unique indexes and reapply the input records to the table space. Alternatively, if appropriate, make the index nonunique and reapply the rejected records to the table space.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of ‘DB2 Diagnosis Guide and Reference’ on pages 1051 for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendices B and C. For information on identifying and reporting the problem.

Severity: 0 (informational)
System Action: Processing continues normally.
User Response: If an index or foreign keys were expected to be found for the table or tables being loaded or reorganized, determine the reason the index or foreign keys could not be found.

Problem Determination: Probably a user error. Determine if an index should be defined on any of the tables in the table space, or if foreign keys should be defined. If so, define the index or foreign keys; otherwise, remove the ‘SORTKEYS’ keyword from the utility statement if necessary.

DSNU356I csect-name INDEXVAL PHASE COMPLETE, ELAPSED TIME = hh/mm/ss
Explanation: The INDEXVAL phase of the LOAD utility has completed normally. The elapsed time for the execution was ‘hh’ hours, ‘mm’ minutes, and ‘ss’ seconds.
Severity: 0 (informational)

DSNU357I csect-name - 'LOG NO' OPTION REQUIRED FOR DB2 CATALOG AND DIRECTORY TABLE SPACES
Explanation: The LOG NO option must be specified when reorganizing a DB2 catalog or directory table space.
Severity: 8 (error)
System Action: Processing terminates.
User Response: Add the LOG NO option to the utility input statement.

DSNU358I csect-name - 'UNLOAD ONLY' OPTION NOT VALID FOR DB2 CATALOG OR DIRECTORY TABLE SPACE
Explanation: The UNLOAD ONLY option is not permitted for DB2 catalog or directory table spaces.
Severity: 8
System Action: Processing terminates.
User Response: Determine the purpose for using the UNLOAD ONLY option. There might be alternative ways of accomplishing the required function (for example, the UNLOAD PAUSE option).

DSNU359I KEYWORD 'SORTKEYS' SPECIFIED BUT NO INDEX OR FOREIGN KEYS EXIST, KEYWORD IS IGNORED
Explanation: The ‘SORTKEYS’ keyword was specified for a LOAD or REORG utility job; however, it was found that no index and no foreign keys were defined for any of the tables being loaded or reorganized. The keyword is ignored and processing continues normally.
Severity: 0 (informational)
System Action: Processing continues normally.
User Response: If an index or foreign keys were expected to be found for the table or tables being loaded or reorganized, determine the reason the index or foreign keys could not be found.

Problem Determination: Probably a user error. Determine if an index should be defined on any of the tables in the table space, or if foreign keys should be defined. If so, define the index or foreign keys; otherwise, remove the ‘SORTKEYS’ keyword from the utility statement if necessary.

DSNU360I csect-name - IN REORG WITH SHRLEVEL REFERENCE OR CHANGE, DATA SET name EXISTS, CONTEXT=c
Explanation: For the area (table space or partition) being reorganized, REORG with SHRLEVEL REFERENCE or CHANGE unloads data from the original data sets and reloads data into shadow data sets. REORG then exchanges the names of the original and shadow data sets, using temporary names during the renaming. The original name of a data set is in the form “catname.DSNDBx.dbname.psname.l0001.Annn.” The shadow name of a data set is in the form “catname.DSNDBx.dbname.psname.s0001.Annn.” The temporary name of a data set is in the form “catname.DSNDBx.dbname.psname.t0001.Annn.” REORG uses such data sets for indexes as well as data.

During its initialization, REORG cannot execute if:
- data sets with the temporary names already exist
- DB2-managed data sets with the shadow names already exist
- user-managed data sets with the shadow names do not already exist

To exchange the names of the original and shadow data sets, REORG performs the following renaming:
1. In the switch phase, it renames the original data set from the original name to the temporary name.
2. In the switch phase, it renames the shadow data set from the shadow name to the original name.
3. In the switch phase, it renames the original data set from the temporary name to the shadow name (for user-managed data sets). It deletes the temporary for DB2-managed data sets.

If a TERM UTILITY command is issued after any renaming, or a restart of the REORG switch phase occurs after any renaming, the data set names revert back to their original form prior to the renaming:
4. The original data set from the shadow name to the temporary name.
The shadow data set from the original name to the shadow name.

The original data set from the temporary name to the original name.

The context code indicates the specific type of error:

1. During the switch phase of REORG, on rename 1, REORG detected that a data set with a temporary name already exists. This error condition can arise for a DB2-managed or user-managed data set.

2. During the switch phase of REORG, on rename 2, REORG detected that a data set with a temporary name already exists. This error condition can arise for a DB2-managed or user-managed data set.

3. During the utility phase of REORG, on rename 3, REORG detected that a data set with a shadow name already exists. This error condition can arise for a user-managed data set.

4. During switch phase restart or a -TERM UTILITY during the switch phase, on rename 4 (while reverting back to the original name), -TERM UTILITY detected that a data set with a temporary name already exists. This error condition can arise for a DB2-managed or user-managed data set.

5. During switch phase restart or a -TERM UTILITY during the switch phase, on rename 5 (while reverting back to the original name), -TERM UTILITY detected that a data set with a shadow name already exists. This error condition can arise for a DB2-managed or user-managed data set.

6. During switch phase restart or a -TERM UTILITY during the switch phase, on rename 6 (while reverting back to the original name), -TERM UTILITY detected that a data set with a temporary name already exists. This error condition can arise for a DB2-managed or user-managed data set.

7. During initialization of REORG, REORG detected that a data set with a temporary name already exists. This error condition can arise for a DB2-managed or user-managed data set.

Severities:

- **0** (informational)
- **1** (informational)
- **2** (informational)
- **3** (informational)
- **4** (warning)
- **5** (warning)
- **6** (warning)
- **7** (error)
- **8** (error)

System Actions:

- For context code 1 or 2, the utility job step that caused the function to be requested aborts with code 00E4031B. The utility job is placed in the stopped state.

- For context code 3, the utility job step that caused the function to be requested continues without performing this renaming.

- For context code 4, 5, or 6, the object is left in a recovery pending state. -TERM UTILITY continues to undo renaming, and a message is issued. The objects and messages are as follows:
  - If the data set is part of a nonpartitioned table space, the object is the table space, and the message is DSNU562I.
  - If the data set is part of a partition of a table space, the object is the partition, and the message is DSNU560I.
  - If the data set is part of a nonpartitioned index, the object is the index, and the message is DSNU557I.
  - If the data set is part of a partitioned index, the object is the partition of the index, and the message is DSNU559I.

For context code 8, REORG does not execute.

User Response: For context code 1 or 2, you can choose between these actions:

- Delete the data set; then RESTART the utility.
- TERM the utility. Delete the data set before trying to execute REORG again with SHRLEVEL REFERENCE or CHANGE.

For context code 3, if you want to perform the renaming, delete the data set with the shadow name and then perform the renaming.

For context code 4, 5, or 6, execute the RECOVER or REBUILD INDEX utility; then delete the shadow and temporary data sets (if they still exist).

For context code 8, delete the data set and then execute REORG.

**DSNU361I** csect-name FOREIGN KEY HAS NO PRIMARY KEY FOR RELATIONSHIP=r1 INPUT RECORD NUMBER=nnnn, RID=X"rrr"

Explanation: Input record 'nnnn' caused a row to be loaded into table 'table' at RID 'rrr' with no primary key for the relationship with the name 'r1'.

Severity: 4 (warning)

System Action: Processing continues.

User Response: None required. The constraint violation described will be rectified later in processing.

**DSNU362I** csect-name - IN REORG WITH SHRLEVEL CHANGE, LOG HAS BECOME SHORT, BUT MAXRO IS DEFER, MEMBER=member-name, UTILID=utilid

Explanation: In execution of the REORG utility with SHRLEVEL CHANGE, if the value of MAXRO is DEFER, and the actual time for an iteration and the estimated time for the next iteration are both less than 5 seconds, then DB2 adds a 5 second pause to the next iteration. This pause limits the utility's consumption of processor time.

Within an execution of REORG, the first time that this situation occurs, DB2 produces this message, which announces the pause. On all later occurrences of this situation, DB2 still adds the pause, but DB2 sends the message only if DB2 has not sent the message (for this execution of REORG) within the past 30 minutes. This is a WTO message; it is sent to the console, but it is not an action message. It is not sent to SYSPRINT.

In a data sharing environment, member-name identifies the DB2 member. In a non-data-sharing environment, member-name is blank. utilid identifies the utility job step.

Severity: 0 (informational)

System Action: REORG continues execution, with a 5 second pause. If the conditions in the explanation above continue to be true, DB2 will continue adding 5 second pauses.

User Response: If you have been planning to wait for an appropriate time to execute the -ALTER UTILITY command to choose the value of MAXRO and thus cause REORG to finish, now might be an appropriate time. However, you are not required to take any action.

Operator Response: If you have been planning to wait for an appropriate time to execute the -ALTER UTILITY command to increase the value of MAXRO and thus cause REORG to
finish, now might be an appropriate time. However, you are not required to take any action.

**DSNU363I csect-name - ENFORCE PHASE STATISTICS - RELATIONSHIP r1 FOREIGN KEYS CHECKED=m CONSTRAINT VIOLATIONS ENCOUNTERED=n**

**Explanation:** This message provides statistics for the enforce phase of the load utility. For relationship 'r1', the number of foreign keys checked is 'm'. The number of constraint violations found is 'n'.

**Severity:** 0 (informational)

**System Action:** Processing continues.

**DSNU365I csect-name - USER auth-id DOES NOT HAVE AUTHORITY ON REORG MAPPING TABLE**

**Explanation:** The REORG utility was run with SHRLEVEL CHANGE and a mapping table, but user auth-id does not have authority to delete, insert, select, and update in the mapping table specified in the utility statement.

**Severity:** 8 (error)

**System Action:** Further utility processing is terminated.

**User Response:** Obtain authorization to delete, insert, select, and update in the mapping table specified in the utility statement.

**DSNU366I csect-name - REORG MAPPING TABLE HAS WRONG COLUMNS**

**Explanation:** A mapping table was specified for a utility job executing REORG with SHRLEVEL CHANGE. However, the table has the wrong set of columns. This message can arise for any parameters of CREATE TABLE that are missing from, added to, or different from the CREATE TABLE statement that appears for the mapping table in the REORG section of DB2 Utility Guide and Reference. It can also arise for the existence of any other indexes on the mapping table.

**Severity:** 8 (error)

**System Action:** REORG does not execute.

**User Response:** Create a mapping table with the correct set of columns, and no other columns, as specified under REORG in DB2 Utility Guide and Reference. Execute REORG.

**DSNU369I csect-name - ENFORCE PHASE COMPLETE, ELAPSED TIME = hh:mm:ss**

**Explanation:** The ENFORCE phase of the LOAD utility has completed normally. The elapsed time for the execution was 'hh' hours, 'mm' minutes, and 'ss' seconds.

**Severity:** 0 (informational)

**DSNU370I csect-name - THE LOCAL FORMAT OPTION HAS BEEN USED WITH A DATE OR TIME AND NO LOCAL EXIT HAS BEEN INSTALLED.**

**Explanation:** The Installation Application Programming Defaults Panel indicated that an exit for date or time was supplied, but the exit supplied by DB2 was not replaced.

**Severity:** 8 (error)

**System Action:** The statement cannot be executed.

**User Response:** Contact the system programmer about installation of the date or time exit.

**System Programmer Response:** To replace the DB2-supplied exit routine, an SMP USERMOD must be applied. If an SMP USERMOD is undesirable, the replacement module may be linked into a user library either included in the MVS LINKLIST or concatenated to the STEPLIB in the started task JCL for ssnmDBM1 (ssnm is the subsystem name).

**DSNU371I csect-name - REORG MAPPING TABLE'S TABLE SPACE MUST BE SEGMENTED**

**Explanation:** REORG with SHRLEVEL CHANGE specified a mapping table for a table space that is not segmented. The table space that contains the mapping table must be segmented.

**Severity:** 8 (error)

**System Action:** REORG does not execute.

**User Response:** Specify a mapping table that is in a table space that is segmented.
DSNU372I  csect-name - CANNOT REORGANIZE REORG MAPPING TABLE'S TABLE SPACE

Explanation: REORG with SHRLEVEL CHANGE specified a mapping table that resides in the table space that is being reorganized. The table space that contains the mapping table must not be the table space that is being reorganized.

Severity:  8 (error)

System Action: REORG does not execute.

User Response: Specify a mapping table that is not in the table space that is being reorganized.

DSNU373I  csect-name - IN -ALTER UTILITY OR REORG WITH SHRLEVEL REFERENCE OR CHANGE, DEADLINE HAS ALREADY OCCURRED, CONTEXT=c

Explanation: If a deadline is specified in the -ALTER UTILITY command or the REORG utility with SHRLEVEL REFERENCE or CHANGE, the deadline cannot occur before the time of execution of the -ALTER UTILITY or REORG that specified the deadline. Context codes are:

1  The error occurred on -ALTER UTILITY.
2  The error occurred on REORG.

Severity:  8 (error)

System Action: -ALTER UTILITY or REORG does not execute.

User Response: Execute -ALTER UTILITY or REORG with no deadline or with a deadline that has not already occurred. If you want to terminate an execution of REORG, use the -TERM UTILITY command.

DSNU374I  csect-name - REORG WITH SHRLEVEL REFERENCE or CHANGE HAS BEEN TERMINATED, REASON=c

Explanation: REORG with SHRLEVEL REFERENCE or CHANGE has been terminated.

1  REORG with SHRLEVEL CHANGE specified LONGLOG TERM, and at the end of an iteration of log processing, the number of log records that the next iteration would process is not sufficiently lower than the number that the previous iterations processed.
2  DB2 estimated that the switch phase of REORG with SHRLEVEL REFERENCE or CHANGE would not start by the deadline specified in the DEADLINE phrase.

Severity:  8 (error)

System Action: REORG terminates.

User Response: For reason code 1, attempt a new invocation of reorganization later, perhaps when you expect that the application workload is lower or the maximum desired amount of time for applications to have read-only access is longer.

For reason code 2 on SHRLEVEL CHANGE, attempt a new invocation of reorganization later, perhaps when you expect to have a longer time available, you expect that the application workload is lower, or you expect that the maximum desired amount of time for applications to have read-only access is longer. For reason code 2 on SHRLEVEL REFERENCE, attempt a new invocation of reorganization later, perhaps when you expect to have a longer time available.

DSNU375I  csect-name DISCARD PHASE STATISTICS - mnn INPUT DATA SET RECORDS DISCARDED

Explanation: Input data set records were rejected by the LOAD utility for one or several reasons. The rejected records have been placed in a discards data set. The number of records rejected is 'mnn'. Message DSNU399I summarizes the errors causing the records to be rejected.

Severity:  4 (warning)

System Action: Processing continues.

User Response: Examine the LOAD error summary and decide which of the discarded records, if any, should be corrected and reapplied to the table space.

DSNU376I  csect-name DISCARD PHASE COMPLETE, ELAPSED TIME = hh/mm/ss

Explanation: The DISCARD phase of the LOAD utility has completed normally. The elapsed time for the execution was 'hh' hours, 'mm' minutes, and 'ss' seconds.

Severity:  0 (informational)

DSNU377I  csect-name - IN REORG WITH SHRLEVEL CHANGE, THE LOG IS BECOMING LONG, MEMBER=member-name, UTILID=utilid

Explanation: During log processing for REORG with SHRLEVEL CHANGE, the number of log records that the next iteration will process is not sufficiently lower than the number that the previous iterations processed. This situation means that during reorganization, the log is not being read quickly enough to catch up to the application writing the log. This is a WTO message; it is sent to the console, but it is not an action message. It is also sent to SYSPRINT.

DB2 refrains from taking the action specified in the LONGLOG phrase if any one of the following events occurs for this execution of REORG before the delay expires:

- An -ALTER UTILITY command is issued.
- A -TERM UTILITY command is issued.
- DB2 estimates that the time to perform the next iteration will be less than or equal to the time specified in the MAXRO phrase.
- REORG terminates for any reason (including the deadline).

member-name Identifies the DB2 member in a data sharing environment. Blank in a non-data-sharing environment.

utilid Identifies the utility job step.

Severity:  4 (warning)

System Action: After a delay (specified by the DELAY phrase of the REORG utility or the -ALTER UTILITY command), REORG performs the action specified by the LONGLOG phrase of the REORG utility or the -ALTER UTILITY command.

User Response: No action is required. However, if the action specified by the LONGLOG phrase is not desired, the operator (or a user-written program that is triggered by the message) can take an action. For a list of possible actions, see the description of LONGLOG in the REORG section of DB2 Utility Guide and Reference.

Operator Response: No action is required. However, if the action specified by the LONGLOG phrase is not desired, the
operator (or a user-written program that is triggered by the message) can take an action. For a list of possible actions, see
the description of LONGLOG in the REORG section of DB2 Utility Guide and Reference.

**Explanation:**
REORG with SHRLEVEL NONE allows the following combinations of the SORTDATA and NOSYSREC keywords:
- Neither keyword
- SORTDATA alone (without NOSYSREC)
- SORTDATA NOSYSREC

These combinations do not trigger this message. However, NOSYSREC alone (without SORTDATA) is inappropriate and
triggers this message with a reason code of 1.

Also, for REORG with SHRLEVEL NONE, if you specify
UNLOAD PAUSE, UNLOAD ONLY, or UNLOAD EXTERNAL,
NOSYSREC is inappropriate and triggers this message with a
reason code of 2. If the two conditions (omission of
SORTDATA and inclusion of UNLOAD PAUSE, ONLY, or
EXTERNAL) are both true, NOSYSREC triggers this message
with a reason code of 2.

**Severity:** 8 (error)

**System Action:** REORG does not execute.

**User Response:** Specify an invocation of REORG with appropriate parameters. Specifically, for reason code 1, if you
want to execute REORG with SHRLEVEL NONE, add
SORTDATA and/or remove NOSYSREC. For reason code 2, if you
want to execute REORG with SHRLEVEL NONE, remove
NOSYSREC, UNLOAD PAUSE, UNLOAD ONLY, or UNLOAD
EXTERNAL.

**Explanation:**
REORG with SHRLEVEL NONE has already started, no ALTER is performed.

**Severity:** 4 (warning)

**System Action:** ALTER UTILITY has no effect.

**Explanation:**
An image copy is required to establish a new base from which
the table space can be recovered. Otherwise, the results of running the RECOVER utility on that table space are unpredictable.

**Severity:** 4 (warning)

**System Action:** DB2 has accepted the request to alter the indicated utility job step. The utility alters its parameter values.

**User Response:** This message is an acknowledgement that the request has been accepted and is in progress.

**Explanation:**
REORG utility failed, correct all specified errors for the associated table space before attempting another image copy of that table space.

**Severity:** 8 (error)

**System Action:** REORG does not execute.

**User Response:** Specify an invocation of REORG with appropriate parameters. Specifically, for reason code 1, if you
want to execute REORG with SHRLEVEL NONE, add
SORTDATA and/or remove NOSYSREC. For reason code 2, if you
want to execute REORG with SHRLEVEL NONE, remove
NOSYSREC, UNLOAD PAUSE, UNLOAD ONLY, or UNLOAD
EXTERNAL.

**Explanation:**
This message is issued after:
- A LOAD or REORG utility with the LOG(NO) option left the associated table space in an unrecoverable state.
- An image copy failed because broken pages were detected or an image copy was terminated.
- A partial recovery finished successfully.
- A MODIFY RECOVERY left the associated table space in an unrecoverable state.

If the RECOVER TABLESPACE utility with keyword
TOCOPY is being used, the START_RBA or
START_LRSN value of the associated full image copy
might be outside the available recovery information. To
verify this, look at the REPORT utility output. The
RECOVER TABLESPACE utility will process the TOCOPY
keyword and put the recovering object in copy pending status.

An image copy is required to establish a new base from which
the table space can be recovered. Otherwise, the results of running the RECOVER utility on that table space are unpredictable.

**Severity:** 4 (warning)

**System Action:** DB2 has accepted the request to alter the indicated utility job step. The utility alters its parameter values.

**User Response:** This message is an acknowledgement that the request has been accepted and is in progress.

**Explanation:**
REORG utility failed, correct all specified errors for the associated table space before attempting another image copy of that table space.

**Severity:** 8 (error)

**System Action:** REORG does not execute.

**User Response:** Specify an invocation of REORG with appropriate parameters. Specifically, for reason code 1, if you
want to execute REORG with SHRLEVEL NONE, add
SORTDATA and/or remove NOSYSREC. For reason code 2, if you
want to execute REORG with SHRLEVEL NONE, remove
NOSYSREC, UNLOAD PAUSE, UNLOAD ONLY, or UNLOAD
EXTERNAL.

**Explanation:**
This message is issued after:
- A LOAD or REORG utility with the LOG(NO) option left the associated table space in an unrecoverable state.
- An image copy failed because broken pages were detected or an image copy was terminated.
- A partial recovery finished successfully.
- A MODIFY RECOVERY left the associated table space in an unrecoverable state.

If the RECOVER TABLESPACE utility with keyword
TOCOPY is being used, the START_RBA or
START_LRSN value of the associated full image copy
might be outside the available recovery information. To
verify this, look at the REPORT utility output. The
RECOVER TABLESPACE utility will process the TOCOPY
keyword and put the recovering object in copy pending status.

An image copy is required to establish a new base from which
the table space can be recovered. Otherwise, the results of running the RECOVER utility on that table space are unpredictable.

**Severity:** 4 (warning)

**System Action:** DB2 has accepted the request to alter the indicated utility job step. The utility alters its parameter values.

**User Response:** This message is an acknowledgement that the request has been accepted and is in progress.
ITERATION: ELAPSED TIME = hh:mm:ss
NUMBER OF LOG RECORDS TO BE PROCESSED = nnnnn

Explanation: This message applies only during the LOG phase of REORG with SHRLEVEL CHANGE. It supplements message DSNU105I which can appear in any phase (including the LOG phase).

This message is issued in response to a DISPLAY UTILITY command.

It is also issued by the REORG utility if the user specified SHRLEVEL REFERENCE or CHANGE and DB2 estimates that the switch phase will not start by the deadline specified by the DEADLINE phrase. This message provides the user with an estimate of how far the REORG utility has proceeded in the switch phase.

For the iteration before the previous iteration:
ha:ma:sa The elapsed time for the iteration
nnnnna The number of log records processed in the iteration.

These values are 00:00:00 and 0 if the current iteration number is 1 or 2.

For the previous iteration:
hb:mb:sb The corresponding information.
nnnnb The number of log records processed in the iteration.

These values are 00:00:00 and 0 if the current iteration number is 1.

For the current iteration:
hc:mc:sc The estimated elapsed time
hd:md:sd The elapsed time so far
nnnnnd The actual number of log records being processed

For the next iteration:
he:me:se The currently estimated elapsed time
nnnne The currently estimated number of log records to be processed

Severity: 0 (informational)

System Action: The message reflects the state of DB2 at the time of the -DISPLAY UTILITY command or the time when DB2 estimated that the switch phase would not start by the deadline specified by the DEADLINE phrase.

If this message was issued for -DISPLAY UTILITY, the system continues processing. A subsequent -DISPLAY UTILITY command reflects the results (if any) of the -ALTER UTILITY command.

DSNU385I csect-name - LOG PHASE COMPLETE,
ELAPSED TIME = hh:mm:ss

Explanation: This message is issued at the normal completion of the LOG phase of the REORG utility. The time that has elapsed between the beginning and the completion of this phase was:

hh hours
mm minutes
ss seconds

Severity: 0 (informational)

System Action: Processing continues to the next phase of the REORG utility.

DSNU386I csect-name - LOG PHASE STATISTICS.
NUMBER OF ITERATIONS = nnnnni, NUMBER OF LOG RECORDS = nnnnnn

Explanation: This message is issued at the normal completion of the LOG phase of the REORG utility.

i...i The number of iterations of log processing that were performed. This number includes one or more iterations during which applications have read/write access plus one final iteration during which applications have read-only access.

nnnnn The number of log records that were read.

Application of some of these log records might be unnecessary. Therefore, the LOG phase might apply only a subset of these log records to the shadow copy of the table space or partition.
**DSNU387I • DSNU394I**

Severities: 0 (informational)

**System Action:** The LOG phase of the REORG utility is completed.

**Explanation:** This message is issued at the normal completion of the LOG phase of the REORG utility. The number of indexes that were built is indicated as **mmm**.

**Severity:** 0 (informational)

**System Action:** Processing continues to the next phase of the REORG utility.

---

**DSNU389I csect-name - BUILD2 PHASE COMPLETE,**

**ELAPSED TIME = hh:mm:ss**

**Explanation:** This message is issued at the normal completion of the BUILD2 phase of the REORG utility. The time that has elapsed between the beginning and the completion of this phase was:

- **hh** hours
- **mm** minutes
- **ss** seconds

**Severity:** 0 (informational)

**System Action:** Processing continues to the next utility statement in the utility job step, if any.

---

**DSNU390I csect-name - INVALID CONVERSION FOR FIELD cccccccc**

**Explanation:** The input field type for column, ‘cccccccc’, is incompatible with its data type (as found in the catalog).

**Severity:** 8 (error)

**System Action:** Utility processing is terminated.

**User Response:** Correct the error, and resubmit the job. Refer to DB2 Utility Guide and Reference for compatible data types.

---

**DSNU391I csect-name - SORTBLD PHASE STATISTICS,**

**NUMBER OF INDEXES = mmm**

**Explanation:** This message is issued at normal completion of the SORTBLD phase of the LOAD, REORG, or REBUILD INDEX utility. The number of indexes that were built is indicated as **mmm**.

**Severity:** 0 (informational)

**System Action:** The SORTBLD phase of the LOAD, REORG, or REBUILD INDEX utility is completed.

---

**DSNU392I csect-name - SORTBLD PHASE COMPLETE,**

**ELAPSED TIME = hh:mm:ss**

**Explanation:** This message is issued at the normal completion of the SORTBLD phase of the LOAD, REORG, and REBUILD INDEX utility. The time that has elapsed between the beginning of the phase and the completion of this phase was **hh** hours, **mm** minutes, and **ss** seconds.

**Severity:** 0 (informational)

**System Action:** Processing continues to the next phase of the LOAD, REORG, or REBUILD INDEX utility. If this is the last phase, processing continues to the next utility statement in the utility job step, if any.

---

**DSNU393I csect-name SORTBLD PHASE STATISTICS,**

**NUMBER OF KEYS = nnnnnnnnnn FOR INDEX index-name PART part-num**

**Explanation:** This message is issued by the SORTBLD phase of the LOAD, REORG, or REBUILD INDEX utility to report the total number of index key entries used to build the indicated index partition.

**Severity:** 0 (informational)

**System Action:** This message indicates the number of index key entries for the index partition being built. Both unique and nonunique key entries are counted. Rejected key entries are not counted.

**User Response:** You can verify that the number reported is consistent with expectations.

---

**DSNU394I csect-name SORTBLD PHASE STATISTICS,**

**NUMBER OF KEYS = nnnnnnnnnn FOR INDEX index-name**

**Explanation:** This message is issued by the SORTBLD phase of the LOAD, REORG, or REBUILD INDEX utility. The message is repeated for each index built by the LOAD, REORG, or REBUILD INDEX utility. It indicates the total number of index key entries used to build the indicated index. If the index is a partitioning index, the total will equal the sum of the number of index key entries reported in prior DSNU393I messages.

**Severity:** 0 (informational)

**System Action:** This message indicates the number of index key entries for the index being built. Both unique and nonunique key entries are counted. Rejected key entries are not counted.

**User Response:** You can verify that the number reported is consistent with expectations. For example, you can determine if it matches the number of records loaded for the table indexed by the indicated index, which will have been reported in a DSNU303I message issued during the RELOAD phase.
**DSNU395I** \( csect-name \) INDEXES WILL BE BUILT IN PARALLEL, NUMBER OF TASKS = \( nnnn \)

**Explanation:** This message is issued by the RELOAD phase of the LOAD or REORG or UNLOAD phase of REBUILD INDEX utility. The message indicates that the LOAD, REORG, or REBUILD INDEX utility is able to build indexes in parallel. The number of utility tasks used to build the indexes is indicated by \( nnnn \).

**Severity:** 0 (informational)

**System Action:** Processing of the RELOAD phase continues.

**User Response:** You can verify that the number of tasks reported is consistent with expectations. For example, if 3 indexes are to be built, the user might expect to see number of tasks = 6.

**DSNU396I** \( csect-name \) REPORT PHASE COMPLETE, ELAPSED TIME = \( hh/mm/ss \)

**Explanation:** The REPORT phase of the LOAD utility has completed normally. The elapsed time for the execution was \( 'hh' \) hours, \( 'mm' \) minutes, and \( 'ss' \) seconds.

**Severity:** 0 (informational)

**DSNU397I** \( csect-name \) NUMBER OF TASKS CONstrained BY \( xxxxxxxx \)

**Explanation:** This message is issued by the RELOAD phase of the LOAD or REORG or UNLOAD phase of the REBUILD INDEX utility. The message indicates that while the LOAD, REORG, or REBUILD INDEX utility is able to build indexes in parallel, the number of tasks it will use to build the indexes has been constrained by a lack of some resource. The constraining resource is specified by \( xxxxxxxx \), which can have the following values and meanings:

- **VIRTUAL STORAGE** The utility could start additional tasks to build indexes, but there is insufficient virtual storage in the address space in which the utility job is running to make it effective to do so.

- **VIRTUAL STORAGE BELOW** The utility could start additional tasks to build indexes, but there is insufficient virtual storage below the line in the address space in which the utility job is running to make it effective to do so.

- **DD STATEMENTS** The utility could start additional tasks to build indexes, but the user has specified DD statements for the data sets to be used by SORT for sort work data sets or for sort message data sets, and fewer sort work data set groups or sort message data sets have been specified than the maximum number of tasks the utility could otherwise start.

- **CONNECTIONS** The utility could start additional tasks to build indexes, but there are not enough free threads available to DB2 to do so.

**Severity:** 0 (informational)

**System Action:** Processing of the phase continues.

**User Response:** No action is required. However, if you want to increase the number of tasks used by the utility in order to reduce the elapsed time of the utility job, then the possible actions to take depend on the value of \( xxxxxxxx \) in the message.

**DSNU398I** \( csect-name \) UNEXPECTED PROCESSING ERROR, REASON=X00E40318, ON TABLE \( tttttt \)

**Explanation:** When attempting to load a record into table \( tttttt \), an error was encountered. Refer to [Section 4. DB2 Codes on page 577] for an explanation of reason code 'X00E40318'.

**Severity:** 8 (error)

**System Action:** If the error was caused by a resource not being available, a DSNT500I message is issued.

The utility step is abended with a system X'04E' with an abend reason code of '00E40318'. If a DSNT500I message is not issued, an SVC dump is requested. A SYSABEND dump of batch storage is also requested.

The utility step is left in the stopped state.

**User Response:** If a DSNT500I message was issued, refer to its description under that message number in this manual. If the unavailable resource becomes available, the utility step is restartable.

If a DSNT500I message is not issued, the error is an internal error. Notify the system programmer.

**Operator Response:** An operator with SYSOPR authority can issue a TERM UTIL to free any held resources (this may not be necessary).

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of **DB2 Diagnosis Guide and Reference** for information on identifying and reporting the problem.

**DSNU399I** \( csect-name \) - LOAD UTILITY ERROR SUMMARY REPORT

**Explanation:** This message summarizes errors detected during the load job. [Figure 1 on page 412] shows the format of the report. It is issued only if unique index or referential constraint violations were detected.
The relative record number in the input data set of ddsm
idsrm
The relative record number in the input data set of
sev
The report fields have the following meanings:

- **type**
  - A description of the type of error reported on this line, as follows:
    - Conversion
    - Field specification
    - Validation
    - Part Specification
    - Unexpected
    - Column specification
    - Referential integrity
    - Check constraint
    - Duplicate key.

- **name1**
  - The name of the table for which the record causing the error was targeted, if this information is pertinent for the type of error reported on this line. Otherwise, name1 is blank. This field has nonblank values for the following error types:
    - Conversion
    - Validation
    - Column specification
    - Referential integrity (primary).
    - Check constraint

- **name2**
  - The name of the field or fanset involved in the error reported on this line, if this information is pertinent for the type of error reported. Otherwise, name2 is blank. This field contains a field name for the following types of errors:
    - Conversion
    - Field specification
    - Column specification.

For primary referential integrity errors, name2 is a relationship name. For check constraint errors, name2 is a check constraint name.

Figure 1. LOAD Utility Error Summary Report

The report contains one line for each error. The errors are listed first by error severity and within that by idsrm.

The **Discard Heading** is either DISCARD RECORD or blank, depending on whether discard processing is in effect.

The report fields have the following meanings:

- sev: The severity of the error reported on this line:
  - 1: Primary (Primary referential integrity errors and all non-referential integrity errors).
  - 2: Secondary (Secondary referential integrity errors (that is, errors that result from a primary referential integrity error in an ancestor)).

- idsrm: The relative record number in the input data set of the record causing the error reported on this line.

- ddsrm: The relative record number in the input data set of the record causing the error reported on this line, if discard processing is in effect. Otherwise, ddsrm is blank.

- type: A description of the type of error reported on this line, as follows:
  - Conversion
  - Field specification
  - Validation
  - Part Specification
  - Unexpected
  - Column specification
  - Referential integrity
  - Check constraint
  - Duplicate key.

- name1: The name of the table for which the record causing the error was targeted, if this information is pertinent for the type of error reported on this line. Otherwise, name1 is blank. This field has nonblank values for the following error types:
  - Conversion
  - Validation
  - Column specification
  - Referential integrity (primary).
  - Check constraint

- name2: The name of the field or fanset involved in the error reported on this line, if this information is pertinent for the type of error reported. Otherwise, name2 is blank. This field contains a field name for the following types of errors:
  - Conversion
  - Field specification
  - Column specification.

For primary referential integrity errors, name2 is a relationship name. For check constraint errors, name2 is a check constraint name.

Severity: 4 (warning)

System Action: Processing continues.

<table>
<thead>
<tr>
<th>ERROR</th>
<th>SEVERITY</th>
<th>INPUT</th>
<th>DISCARD</th>
<th>ERROR</th>
<th>TABLE</th>
<th>NAME</th>
<th>FIELD/TARGET</th>
<th>RELATED</th>
<th>DISDSRM</th>
</tr>
</thead>
<tbody>
<tr>
<td>sev</td>
<td>1</td>
<td>idsrm</td>
<td>ddsm</td>
<td>type</td>
<td>name1</td>
<td>name2</td>
<td>idsrm</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The input data set record number of a related error. For duplicate key errors, it gives the input data set record number of the record whose key is duplicated. For secondary referential integrity errors, it gives the input data set record number of the record whose primary referential integrity error cascaded to cause this secondary error. For other types of errors, this field is unused.

Explanation: This is an informational message to report the copy statistics. This message is issued by the COPY utility, and it can also be issued from LOAD or REORG if a full image copy has been requested during a table space load or reorganization. The statistics apply to pages included in the scope of the COPY request. This can either be a full table space, full index space (DSNUM(ALL)) or a partition (DSNUM(integer)). All the pages in the table space, index space, or partition can be copied (FULL(YES)), or only the changed pages can be copied (FULL(NO)). The message variables are:

- **ff.ff**: The average percentage of free space within the copied pages. This indicates the amount of change activity that can occur without significant impairment of reference performance.

- **nnnnnn**: The number of pages written out.

- **pp.pp**: The percentage of changed pages. This indicates the amount of change activity that occurred since the last image copy or reorganization. The percentage of changed pages is obtained by dividing the number of changed pages by the number of pages in the object. Preformatted pages containing all zeros are included in the count of pages scanned. Since these preformatted pages are not copied to the output data set, the number of pages scanned is usually larger than the number of pages copied.

When this message is issued for image copies produced during LOAD or REORG, this percentage will always be reported as 100%, because the utility is resetting and reformattting the entire table space.

System Action: The COPY, LOAD or REORG utility continues processing this message is for information only. Message DSNU428I will be issued when the copy processing is complete.

User Response: Reported statistics could suggest that either a RUNSTATS or REORG utility should be run on the table space.
**DSNU401I** csect-name CONCURRENT COPY COMPLETE, ELAPSED TIME= hh:mm:ss

Explanation: The DFSMS Concurrent Copy utility completed normally.

Severity: 0 (informational)

System Action: Processing continues to the next utility statement in the utility job step. If there are no more utility statements, the utility job step is normally terminated, and the resources are released to their prior availability state. The utility identifier (UTILID) of the utility job step becomes available for reuse.

User Response: No action is required.

---

**DSNU402I** csect-name INCREMENTAL IMAGE COPY DISALLOWED FOR obj-type obj-qual.obj-name FULL IMAGE COPY WILL BE TAKEN

Explanation: An incremental image copy for a table space or data set was requested. However, a full image copy is required. Possible reasons include:

- The request was for one of the DB2-maintained table spaces DSND01.BD01, DSND06.SYSCOPY, or DSND01.SYSUTILX.
- A LOAD or REORG utility was run on the table space or data set with no subsequent full image copy.
- No full image copy was found for the requested sites.
- Copy pending status was set for the requested table space or data set.
- The request was for an entire table space, but the most recent image copy for the table space is on the data set level.
- The previous image copy is a DFSMS concurrent copy.

The request for an incremental image copy is ignored, and a full image copy is taken.

Severity: 4 (warning)

System Action: The request to take an incremental image copy is treated as a request to take a full image copy.

User Response: The capacity of the target image copy data set might not be sufficient if its size was established assuming an incremental image copy. If this condition occurs, terminate and then resubmit the job step.

---

**DSNU403I** csect-name - FULL AND INCREMENTAL COPIES OF THE SAME TABLESPACE ON THE SAME TAPE DISALLOWED DDNAME ddname

Explanation: The COPY utility has been invoked to take an incremental image copy of a TABLESPACE. The specified output data set is on a tape which contains another FULL or INCREMENTAL image copy of the same TABLESPACE. This is not allowed.

Severity: 8 (error)

System Action: The utility will terminate with a return code of 8, and will not take the image copy or update the SYSCOPY table.

User Response: Change the VOLSER for the image copy output data set or use the MODIY RECOVERY utility to delete SYSIBM.SYSCOPY records which are no longer needed for the same TABLESPACE and tape volume.

**Problem Determination:** Use the SQL SELECT command to look at the SYSIBM.SYSCOPY table. If the conflicting image copy data sets on the output tape are no longer needed, use MODIFY RECOVERY to eliminate the related SYSIBM.SYSCOPY records. If the data sets are still needed, you must place the new image copy on a different tape or you must take a FULL image copy.

---

**DSNU404I** csect-name LOCAL SITE AND RECOVERY SITE INCREMENTAL IMAGE COPIES ARE NOT SYNCHRONIZED FOR obj-type obj-qual.obj-name

Explanation: No incremental image copy can be made if

1. The incremental image copy is requested only for a site other than the current site.
2. The incremental image copies are requested for both sites, but the most recent full image copy was made only for the current site.
3. The incremental image copies are requested for both sites, and the most recent full image copies were made for both sites, but between the most recent full image copy and current request, all incremental image copies were made for current site only.

Severity: 8(error)

System Action: The utility will terminate with a return code of 8, and will not take the image copy or update the SYSCOPY table.

User Response: Take another full image copy of the TABLESPACE for both LOCAL site and RECOVERY site or change the request to make incremental image copy only for current site.

---

**DSNU406I** FULL IMAGE COPY SHOULD BE TAKEN FOR BOTH LOCAL SITE AND RECOVERY SITE FOR obj-type obj-qual.obj-name

Explanation: The requested full image is for one site only but history shows that there were image copies taken for both local site and recovery site and the table space is in copy pending status, or point in time recover has been done on the table space, or the table space is in copy pending status and the requested full image copy is for a site other than the current site. Be aware of the following situations:

1. If the requested copy is made for current site, then the other site can only do point in time recovery.
2. If the requested copy is for the site other than the current site, then the TABLESPACE will be in the same state as before COPY has been made.

Severity: 4 (warning)

System Action: COPY, LOAD, or REORG utility will continue to process the image copy.

User Response: Take another full image copy of the TABLESPACE for both LOCAL site and RECOVERY site to guarantee the correct recovery on both sites or check DSNZPARM to ensure that the current site is the site at which the image copy is being taken.
**DSNU407I**  
**csect-name** - DATA SET ALREADY USED FOR PREVIOUS IMAGE COPY

**Explanation:** A COPY, LOAD, or REORG utility has been invoked to take an image copy to a data set which is a duplicate of one already recorded in SYSCOPY. If the specified data set is cataloged, a matching DSNAME exists. If the specified data set is not cataloged, a matching DSNAME, DSVOLSER, and FILESEQNO exists.

**Severity:** 8 (error)

**System Action:** The utility will terminate with a return code of 8, and will not take the image copy or update the SYSCOPY table.

**User Response:** Change the name of the data set or use MODIFY utility to delete the old SYSCOPY record containing the duplicate data set.

---

**DSNU408I**  
**csect-name** - dsn EXISTS WITH -VOLUME=vol, FILE SEQUENCE-NUMBER=fseq, RBA=rba/lrsn, DATE=date, TIME=time

**Explanation:** If this message is issued after DSNU403I, it provides information from the SYSCOPY catalog table about the previously created image copy of the table space. If this message is issued after DSNU407I, it provides information from the SYSCOPY table about the duplicate data set that was detected during image copy processing.

For copies to DASD or MSS, fseq is 0; for copies of cataloged data sets, vol is (CATG).

**Severity:** 8 (error)

**System Action:** The utility terminates with return code 8 and does not take the image copy or update the SYSCOPY table.

**User Response:** Use the information provided to change the name of the data set or to locate the duplicate SYSCOPY record for deletion with the MODIFY RECOVERY utility.

---

**DSNU409I**  
**csect-name** NO hardware-or-software SUPPORT FOR obj-type obj-qual.obj-name

**Explanation:** This message is issued by the COPY or RECOVER utility for one of the following reasons.

- The COPY utility was invoked to take a DFSMS concurrent copy of a table space or index space that resides on a device with no hardware or software support for the DFSMSdss DUMP command with the CONCURRENT option.
- The RECOVER utility invoked the DFSMSdss RESTORE command without the supporting software.

**Severity:** 4 (for RECOVER) or 8 (for COPY)

**System Action:** The RECOVER utility falls back to the previous image copy data set and continues. The COPY utility job terminates.

**User Response:** If a list of objects is specified in the COPY job, remove the object that has no hardware or software support from the list. Resubmit the job or use the DB2 COPY utility instead of the DFSMS Concurrent Copy utility.

---

**DSNU410I**  
**csect-name**

**obj-type obj-qual.obj-name** CONTAINED NO CHANGED PAGES

**Explanation:** An incremental image copy (COPY option FULL(NO)), which copies only changed pages, was requested. However, no changed pages were found.

**Severity:** 4 (warning)

This message reflects a warning condition that did not prevent subsequent processing.

**System Action:** This message indicates normal completion of the image copy utility. Processing continues to the next utility statement in the utility job step, if any. If there are no more utility statements, the utility job step is normally terminated, and the resources are released to their prior availability state.

The UTILID of the utility job step becomes available for reuse.

Because no output was produced, the SYSIBM.SYSCOPY catalog table remains unchanged.

The requester may want to determine why the apparent assumption that a change occurred was not true.

**Operator Response:** The target copy data set identified by the DD statement nominated by the COPY COPYDDN option was not required. It was not tracked in the DB2 catalog table SYSIBM.SYSCOPY. It need not be kept for subsequent re-call.

---

**DSNU411I**  
**csect-name** UNABLE TO LOGICALLY COMPLETE

**obj-type obj-qual.obj-name** RETURN CODE return-code REASON CODE reason-code

**Explanation:** The DFSMSdss DUMP command with the CONCURRENT option encountered an error during the initialization of the target object being copied. The return code and reason code are from the DFSMSdss DUMP command.

**Severity:** 8

**System Action:** The utility job terminates.

**User Response:** See the return code and reason code in DFSMS/MVS: Administration Reference for DFSMSdss to determine the problem. Resubmit the job after resolving the problem.

---

**DSNU412I**  
**csect-name** UNABLE TO PHYSICALLY COMPLETE

**obj-type obj-qual.obj-name** RETURN CODE return-code

**Explanation:** The DFSMSdss DUMP command with the CONCURRENT option encountered an error during the backup process. The return code is from the DFSMSdss DUMP command.

**Severity:** 8

**System Action:** The utility job terminates.

**User Response:** See the return code description in DFSMS/MVS: Administration Reference for DFSMSdss to determine the problem. Resubmit the job after resolving the problem, or use the DB2 Copy utility instead of the DFSMS Concurrent Copy utility for the failed object.
**Explanation:** The DFSMS Concurrent Copy utility completed normally for the named object. This message is repeated for every copied object in the list.

**Severity:** 0 (informational)

**System Action:** Processing continues to the next object in the list. If there are no more objects, the utility ends normally with message DSNU401I.

**User Response:** No action is required.

**Explanation:** This message is issued by the DB2 COPY utility when an error is encountered during the retrieval of a log record sequence number (LRSN).

This error can occur in these situations:
- Another DB2 in a data sharing group terminated abnormally while trying to update the table space or index space.
- A failure occurred while trying to communicate with other DB2s in the data sharing group.

**Severity:** 8

**System Action:** The utility job terminates.

**User Response:** Issue a -DISPLAY DATABASE command with the USE option to determine if any other DB2 systems hold a retained lock on the table space or index space (status = RSTRT). If so, you must restart that DB2 system before the COPY job can be successfully run.

**Explanation:** Valid block sizes for an image copy or merge copy data set are multiples of 4KB and less than the device limitation.

**Severity:** 8 (error)

**System Action:** Utility processing is terminated.

**User Response:** Correct the JCL statement, or use the default. Resubmit the request in a new utility job step. Refer to DB2 Utility Guide and Reference for a discussion of image copy and work data set constraints.

**Explanation:** The use of partitioned image copy data sets is restricted. The COPY, MERGECOPY, LOAD, or REORG utility job that was submitted has a partitioned output image copy data set, specified by the COPYDDN dname or RECOVERYDDN dname parameter.

**Severity:** 8 (error)

**System Action:** Utility processing is terminated. The image copy will not be taken or the merge will not be done, and the SYSIBM.SYSCOPY table will not be updated.

**User Response:** Correct the utility job by specifying a non-partitioned data set as the output image copy data set.

**Explanation:** The image copy data set reached the limit of 255 volumes and another volume is required.

**Severity:** 8 (error)

**System Action:** The utility job is terminated.

**User Response:** You might want to use the DSNUM option of the COPY utility to identify a partition or data set within the table space to be copied, or specify a partition number to be loaded or reorganized if the copy is being produced from a LOAD or REORG. Refer to DB2 Utility Guide and Reference for a description of the COPY utility and the DSNUM option, and descriptions of the LOAD and REORG utilities and the PART option.

**Explanation:** An image copy at the data set level was requested. However, it is not allowed for one of the following reasons:
- The table space is in copy pending status.
- The table space is not suitable for image copy at the data set level.
- A copy of the entire table space is required.

**Severity:** 8 (error)

**System Action:** The COPY utility completes unsuccessfully with return code 8.

**System Programmer Response:** You must take a full image copy of the entire table space by specifying the DSNUM ALL option with the COPY utility.

**Explanation:** When copying a table space that is not recoverable, the share level (SHRLEVEL) must be REFERENCE.

If the object is an entire table space, ‘DSNUM dsnm’ is not displayed.

**Severity:** 8 (error)

**System Action:** Utility processing is terminated.

**User Response:** Correct the SHRLEVEL to REFERENCE, and resubmit the COPY utility in a new utility job step. Refer to DB2 Utility Guide and Reference for a discussion of COPY utility constraints.
**DSNU421I • DSNU440I**

**DSNU421I**  
`csect-name` START OF DFSMS MESSAGES FOR  
`obj-type obj-qualifier.obj-name`  

Explanation:  This message indicates the beginning of the DFSMS messages; DSNU421I indicates the end.  
System Action: No action is required, but subsequent DFSMS messages might require action. See the DFSMS message manual.  

**DSNU422I**  
`csect-name` END OF DFSMS MESSAGES FOR  
`obj-type obj-qualifier.obj-name`  

Explanation:  This message indicates the end of the DFSMS messages; DSNU422I indicates the beginning.  
System Action: No action is required, but preceding DFSMS messages might require action. See the DFSMS message manual.  

**DSNU423I**  
`csect-name` CANNOT TAKE CONCURRENT COPY WITH SHRLEVEL CHANGE OPTION FOR  
`obj-type obj-qual.obj-name` WITH GREATER THAN 4KB PAGE SIZE  

Explanation: The DFSMS Concurrent Copy utility is serialized at the extent level. The greater than 4KB page size might span more than one extent. This might cause the output data set to contain inconsistent data.  
Severity: 8 (error)  
System Action: The COPY utility completes unsuccessfully with return code 8.  
System Programmer Response: You must take a concurrent copy with the SHRLEVEL REFERENCE option or a DB2 image copy if you prefer the SHRLEVEL CHANGE option.  

**DSNU424I**  
`csect-name` INCOMPATIBLE MAINTENANCE DETECTED. REFERENCE APAR NUMBER `apar` DO THE FOLLOWING:  

Explanation: This message indicates that there is a maintenance incompatibility detected across restart. This message is followed by the actions the user should take to resolve the incompatibility.  
`apar` The number of the APAR with closing text that describes the incompatibility.  
System Action: Utility execution is abended.  
User Response: Refer to the action text in the message.  
System Programmer Response: Refer to the APAR closing text.  

**DSNU425I**  
`csect-name` `obj-type obj-qual.obj-name` DOES NOT HAVE THE COPY YES ATTRIBUTE  

Explanation: The utility cannot process the identified index or index space because it was not defined with the COPY YES attribute. Without the COPY YES attribute, the index cannot be specified as a target for the RECOVER, COPY, or REPORT utilities. If the index needs to be rebuilt from the data in the table space, use the REBUILD INDEX utility instead.  
Severity: 4 (warning) or 8 (error)  
System Action: The RECOVER utility terminates processing with a return code of 8. The COPY utility skips this object but continues processing the other objects in the list. The final copy utility return code will be 8. The REPORT utility issues this message with a return code of 4 and continues processing other objects (if any).  
User Response: Determine whether the index should be altered to have the COPY YES attribute. If so, alter the index then rerun the utility job. Otherwise remove the index from the utility statement.  

**DSNU426I**  
`csect-name` CANNOT COPY ONE PIECE OF NON-PARTITIONING `obj-type obj-qual.obj-name`  

Explanation: The copy of a nonpartitioning index at the data set level is not allowed.  
Severity: 8 (error)  
System Action: The COPY utility skips this object but continues processing the other objects in the list. The final copy utility return code will be 8.  
User Response: Either remove the DSNUM option so that it defaults to DSNUM(ALL) or modify your DSNUM option to DSNUM(ALL).  

**DSNU427I**  
`csect-name` OBJECTS WILL BE PROCESSED IN PARALLEL, NUMBER OF OBJECTS = `nnnn`  

Explanation: This message is issued by COPY or RECOVER utilities. The message indicates that COPY or RECOVER is able to process the objects in the list in parallel. The number of objects used is indicated by `nnnn`.  
Severity: 0 (informational)  
System Action: Processing of the utility continues.  
User Response: You can verify that the number of objects processed is consistent with expectations.  

**DSNU428I**  
`csect-name` DB2 IMAGE COPY SUCCESSFUL FOR `obj-type obj-qual.obj-name`  

Explanation: The image copy of the object processed by the COPY, LOAD, or REORG utility has completed successfully and the image copy data set information has been recorded in the SYSIBM.SYSCOPY catalog table.  
System Action: The COPY utility continues its processing on the next object in the list. The LOAD and REORG utilities continue processing in the subsequent phases.  

**DSNU440I**  

Explanation: This message gives statistical information about the results of running the COPY utility. It applies to a table space, partition, or data set, and is based on the information in the space page map at the time the utility is executed. The output contains the following information:  
`DBNAME` The name of the database to which the table space belongs.  
`TSNAME` The table space specified in the utility statement.
DSNUM  The partition or data set number of the table space. The value is ALL if information is about the entire table space.

4KB or 32KB PAGES  The total number of 4KB or 32KB pages in the partition, data set, or entire table space. This value includes preformatted pages that contain all zeroes.

EMPTY PAGES  The total number of empty pages in the data set of the segmented table space, or entire segmented table space. Empty pages can result from deletes, or are pages that are not yet formatted. They are not copied by the utility.

CHANGED  The number of pages in the partition, data set, or table space that were changed since the last time an image copy was created. If an incremental image copy is taken, this value is the number of pages that are copied.

PERCENT CHANGED  The percent of changed pages in the table space, data set, or partition specified.

ICTYPE  The type of image copy recommended for the partition, data set, or table space specified. ICTYPE is based on the comparison between the percent of changed pages and the change limit values. ICTYPE values:

I  If the percent of changed pages is greater or equal to the low CHANGELIMIT value and less than the high CHANGELIMIT value. An incremental image copy is recommended, or COPY takes one if the REPORTONLY option is not specified.

F  If the percent of changed pages is equal to or greater than the high CHANGELIMIT value. A full image copy is recommended, and COPY takes one if the REPORTONLY option is not specified.

NONE  If no pages were changed. An image copy is not recommended, and COPY does not take one.

blank  For the partition or data set if DSNUM ALL is specified, or if CONCURRENT is specified and the percent of changed pages is less than the CHANGELIMIT value.

Severity:  0 ( informational )
System Action:  Utility processing continues
User Response:  If the message indicates, “INFORMATION CANNOT BE DETERMINED” for a table space, partition, or data set, examine the utility output for the DSNU4441I message which lists the page numbers of the broken pages. See message DSNU4441I for further instructions on repairing pages.
3 (informational)  If the percent of changed pages is greater than or equal to the high CHANGELIMIT value.

**System Action:** Utility processing continues.

**User Response:** If the REPORTONLY option is specified and the result of this job step is not used to conditionally execute other job steps, examine the utility messages for this table space, partition, or data set to determine if it has changed to such a degree that an image copy or other step should be performed.

---

**DSNU445I**  csect-name  ictype IMAGE COPY WILL BE TAKEN FOR

| obj-type obj-qual.obj-name |

**Explanation:** The COPY utility is indicating whether the percent of changed pages in the table space meets the change limit value, and whether an image copy will be taken. ictype values:

- **NO**  If no CHANGELIMIT value met.
- **INCREMENTAL**  If the percent of changed pages is greater than the low CHANGELIMIT value and less than the high CHANGELIMIT value.
- **FULL**  If the percent of changed pages is greater than or equal to the high CHANGELIMIT value.

**Severity:** 0 (informational)

**System Action:** Utility processing continues. An image copy is taken if a change limit is met. If the low CHANGELIMIT value is met, then an incremental copy is taken. If the high CHANGELIMIT value is met, then a full image copy is taken.

---

**DSNU446I**  csect-name - CHANGELIMIT REPORT INFORMATION UNAVAILABLE FOR

| obj-type obj-qual.obj-name, A FULL IMAGE COPY MUST BE TAKEN FOR |

**Explanation:** The changelimit dataset statistical information was requested, but is unavailable. A full image copy is required. Possible reasons are as follows:

- The request was for one of the DB2-maintained table spaces: DSNDB01.DBD01, DSNDB08.SYSCOPY, or DSNDB01.SYSUTILX.
- A LOAD or REORG utility was run on the table space or data set with no subsequent full image copy.
- No full image copy was found for the requested sites.
- Copy pending status was set for the requested table space or data set.
- The request was for an entire table space, but the most recent image copy for the table space is on the data set level.
- The previous image copy is a DFSMS concurrent copy.

The statistical information report will not be generated. If REPORTONLY was omitted, then a FULL image copy is taken.

**Severity:** 4 (warning)

**System Action:** The request for CHANGELIMIT without REPORTONLY is treated as a request to take a full image copy. The request for CHANGELIMIT with REPORTONLY will not generate the report.

**User Response:** If REPORTONLY is specified, then submit a job to take a full image copy.

---

**DSNU445I**  csect-name COPY MERGE COMPLETE.

**NUMBER OF COPIES = iiiii, NUMBER OF COPIES MERGED = cccccc, TOTAL NUMBER OF PAGES MERGED = ttttt, ELAPSED TIME = hh/mm/ss**

**Explanation:** This message marks the normal completion of the MERGECOPY utility. The variables are:

- **iiiii**  The number of copies found.
- **ccccc**  The number of image copies that were merged. The number merged can be less than the number found if a work data set was not specified using the MERGECOPY WORKDDN option.
- **ttttt**  The total number of pages that were merged.

The merged incremental copies were consolidated either into a single new incremental image copy or into a new full image copy, depending upon the MERGECOPY NEWCOPY option. The DB2 catalog table SYSIBM.SYSCOPY was updated to reflect the results.

This message may indicate that prior data set entries were deleted and, consequently, that backup data set resources were freed.

**Severity:** 0/4 (informational/warning)

**System Action:** Processing continues to the next utility statement in the utility job step, if any. If there are no more utility statements, the utility job step is normally terminated, and the resources are released to their prior availability state. The UTILID of the utility job step becomes available for reuse.

**User Response:** You can review the reported statistics to assess the effectiveness of performing incremental image copies. You can examine the SYSIBM.SYSCOPY catalog table to review the incremental and full image copies that are subject to DB2 recovery.

The full or incremental image copy data set identified by the DD statement specified in the COPYDDN option was recorded in SYSIBM.SYSCOPY. DB2 assumes that the image copy data set is now available for subsequent recovery. Ensure that the data set is available for recovery.

---

**DSNU458I**  csect-name NO IMAGE COPIES TO MERGE

**Explanation:** This message is issued in response to a MERGECOPY request. The MERGECOPY utility was invoked to merge existing incremental image copies. However, in checking the DB2 catalog table SYSIBM.SYSCOPY, no incremental image copies were found.

**Severity:** 4 (warning)

A severity 4 condition is given to alert the invoker that processing did not proceed as defined. However, processing is proceeding; nothing was encountered that would invalidate further processing.

**System Action:** This message indicates the completion of the MERGECOPY utility. Processing continues to the next utility statement in the utility job step, if any. If there are no more utility statements, the utility job step is normally terminated, and the resources that were held become available for
REFERENCE processing. The UTILID of the utility job step becomes available for reuse.

The requester may want to determine why the assumption that incremental copies existed was not true.

**Operator Response:** The target copy data set identified by the DD statement nominated by the MERGECOPY COPYDDN option was not required. It was not tracked in the DB2 catalog table SYSIBM.SYSCOPY. It need not be kept for subsequent re-call.

**DSNU459I** SYSCOPY P RECORD ENCOUNTERED FOR

**Explanation:** The utility encountered a SYSCOPY P record which requires that the SYSCOPY record at the given RBA or LRSN be used. The utility properly traverses the SYSCOPY records following this SYSCOPY P record.

**Severity:** 0 (informational)

**User Response:** For further information on how the SYSCOPY records are traversed, see Section 4 (Volume 1) of DB2 Administration Guide.

**DSNU460I** csect-name IMAGE COPIES INCONSISTENT. MERGECOPY REQUEST REJECTED

**Explanation:** MERGECOPY was requested for an entire table space. However, the most recent image copy for the associated table space was on the data set level. In addition, if the associated table space was partitioned, this might indicate that any or all of its partitions were being reorganized or loaded without logging after the MERGECOPY starting point. The MERGECOPY starting point is the most recent full image copy for the entire table space.

**Severity:** 4 (warning)

A severity 4 condition is given to alert the user that processing did not proceed as defined. However, processing is proceeding; nothing was encountered that would invalidate further processing.

**System Action:** This message indicates the completion of the MERGECOPY utility. Processing continues to the next utility statement in the utility job step, if any. If there are no more utility statements, the utility job step is normally terminated, and the resources that were held become available for REFERENCE processing. The UTILID of the utility job step becomes available for reuse.

No output was produced and the SYSIBM.SYSCOPY catalog table remains unchanged.

**User Response:** A full image copy of the associated table space should be taken. However, if it is preferred that a recovery be done on the data set level, a MERGECOPY job should be submitted by specifying ‘DSNUM(data set number)’ for each data set for which MERGECOPY is required.

**DSNU461I** csect-name PRIMARY FULL COPY DATA SET NOT FOUND, BACKUP WILL BE USED INSTEAD

**Explanation:** The primary full image copy cannot be found. The backup full image copy will be located and used for the merge process.

**Severity:** 0 (informational)

**User Response:** If the MERGECOPY utility can use the backup full image copy, the utility continues to process. If no backup full image copy can be used, the utility terminates.

**DSNU462I** csect-name MERGECOPY DISALLOWED FOR REQUESTED TABLE SPACE

**Explanation:** MERGECOPY was requested for table space DSND01.D01, DSND01.SYSUTIL, or DSND06.SYSCOPY. MERGECOPY is not permitted for one of the following reasons:

- Only full image copies are allowed on these DB2-maintained tables.
- There is no record of the full image copies in the SYSIBM.SYSCOPY catalog; the copy information is in the DB2 log.

**Severity:** 8 (error)

**System Action:** Further utility processing is terminated.

**System Programmer Response:** Refer to Section 4 (Volume 1) of DB2 Administration Guide for more information about MERGECOPY utility constraints.

**DSNU463I** csect - THE xxxxxxx IMAGE COPY DATA SET data-set-name WITH DATE=ddddd AND TIME=tttttt, IS PARTICIPATING IN MERGECOPY.

**Explanation:** This informational message indicates the image copy that is used in the merge process. The variables have the following meanings:

- xxxxxxx: PRIMARY or BACKUP, indicating a primary or backup image copy
- data-set-name: The image copy data set name
- ddddd: The image copy date
- ttttt: The image copy time

**Severity:** 0 (informational)

**User Response:** The utility continues to process normally.

**DSNU464I** THIS IS A sitetype: outputtype WITH NEWCOPY NO IS NOT ALLOWED.

**Explanation:** The ‘NEWCOPY NO’ option to create incremental image copies is not supported for the current site. This error can be caused by:

- Running the MERGECOPY utility at sitetype LOCALSITE, but selecting the RECOVERYDDN with the ‘NEWCOPY NO’ option.
- Running the MERGECOPY utility at sitetype RECOVERYSITE, but selecting the COPYDDN with the ‘NEWCOPY NO’ option.

**Severity:** 8 (error)

**System Action:** The command cannot be executed.

**User Response:** Correct the error and resubmit the job. Refer to DB2 Utility Guide and Reference for detailed information.
**Problem Determination:** Refer to Section 4 (Volume 1) of DB2 Administration Guide for a discussion of the database recovery function.

**User Response:** Run DISPLAY DATABASE to determine what exception state, if any, would prevent image copy on the table space.

**Problem Determination:** The problem may be an I/O error.

---

**Explanation:** This message displays the log RBA and LRSN at the time of the quiesce. This value is unique for all quiesced table spaces in the list and is recorded in the START_RBA column of the SYSCOPY catalog table entry for each quiesced table space in the list.

**Severity:** 0 (informational)

**System Action:** Processing continues.

---

**Explanation:** The attempt to externalize index ‘index-name’ pages to the media failed.

**Severity:** 4 (warning)

**System Action:** QUIESCE processing continues.

**User Response:** Issue the DISPLAY DATABASE command to determine the exception state.

**Problem Determination:** Refer to Section 4 (Volume 1) of DB2 Administration Guide for a discussion of the database recovery function.

---

**Explanation:** This message is issued by the running utility when DSNB01.SYSUTILX is found in a table space list of a utility job statement.

**Severity:** 8 (error)

**System Action:** The utility job terminates.

**User Response:** Remove DSND01.SYSUTILX from the table space list or run the utility on DSND01.SYSUTILX separately.

---

**Explanation:** An attempt was made to execute a utility against a table space. Either the table space was in copy pending state or DSND06.SYSCOPY was in copy pending state.

**Severity:** 8 (error)

**System Action:** Utility processing is terminated.

**User Response:** Remove the table space from the copy pending state and resubmit the job.

---

**Explanation:** The attempt to externalize TABLESPACE ‘tablespace-name’ pages to the media has failed.

**Severity:** 4 (warning)

**System Action:** QUIESCE still continues but you cannot make an image copy of the table space. Processing continues for all indexes within the table space and continues to the next table space in the tablespace-list, if any.

**User Response:** Run DISPLAY DATABASE to determine what exception state, if any, would prevent image copy on the table space.

**Problem Determination:** The attempt to externalize TABLESPACE ‘tablespace-name’ pages to the media has failed.

**Severity:** 4 (warning)

**System Action:** QUIESCE still continues but the table space cannot be volume-dumped.

**Problem Determination:** The problem may be an I/O error.
**DSNU478I** csect-name - INDEX index-name HAS PENDING STATE

Explanation: Index 'index-name' has a PENDING state. This message is repeated for all PENDING stated indexes in a table space.

Severity: 8 (error)

System Action: QUIESCE stops processing but continues to check all table spaces and indexes for any additional table space or index that has a PENDING state. There is no update in SYSCOPY table for any table space in the list.

User Response: Issue the DISPLAY DATABASE command to look at the utility status byte in the DBA table for a specified PENDING state.

Problem Determination: Refer to Section 4 (Volume 1) of DB2 Administration Guide for a discussion of the database recovery function.

**DSNU479I** csect-name - UNABLE TO EXTERNALIZE INDEX index-name PAGES

Explanation: The attempt to externalize index 'index-name' pages to the media has failed.

Severity: 4 (warning)

System Action: QUIESCE still continues but the table space cannot be volume-dumped.

Problem Determination: The problem may be an I/O error.

**DSNU480I** csect-name - UNABLE TO EXTERNALIZE TABLESPACE tablespace-name PARTITION partition-number PAGES

Explanation: The attempt to externalize TABLESPACE 'tablespace-name' PARTITION 'partition-number' pages to the media failed.

Severity: 4 (warning)

System Action: QUIESCE still continues but the table space cannot be volume-dumped.

Problem Determination: The problem might be an I/O error.

**DSNU481I** csect-name - QUIESCE SUCCESSFUL FOR obj-type obj-qual.obj-name PARTITION partition

Explanation: The QUIESCE for PARTITION 'partition-number' of this object was successful. If the object is a table space partition, then the quiesce for all of its indexes was successful. This message will also be issued for each index with the COPY YES attribute over the quiesced table space. This message is repeated for every quiesced table space in the list.

Severity: 0 (informational)

System Action: All data held in the DB2 buffer pool(s) for the table space and its indexes have been written out to the media if message DSNU480 or DSNU482 was not issued earlier. A SYSCOPY record of ICTYPE 'O' was recorded in the SYSCOPY catalog table for the table space and for each of its indexes with the COPY YES attribute. The START-RBA value in this SYSCOPY record is the same for all objects quiesced during this invocation of the utility. This RBA value is printed in message DSNU474 following this message. Processing continues to the next table space in the table space list, if any.

**DSNU482I** csect-name - UNABLE TO EXTERNALIZE INDEX index-name PARTITION partition-number PAGES

Explanation: The attempt to externalize index 'index-name' 'partition-number' pages to the media failed.

Severity: 4 (warning)

System Action: QUIESCE still continues, but the table space cannot be volume-dumped.

Problem Determination: The problem might be an I/O error.

**DSNU483I** csect-name - TABLESPACE tablespace-name PARTITION partition-number HAS WRITE ERROR RANGE OR IS IN DEFERRED RESTART.

Explanation: The attempt to externalize table space 'tablespace-name' partition 'partition-number' pages to the media failed.

Severity: 4 (warning)

System Action: QUIESCE still continues, but you cannot make an image copy of the table space or partition. Processing continues for the index partition and all nonpartitioned indexes within the table space, and then proceeds to the next table space in the table space list, if any.

User Response: Issue DISPLAY DATABASE to determine what exception state, if any, would prevent image copy on the table space or partition.

Problem Determination: Refer to Section 4 (Volume 1) of DB2 Administration Guide for a discussion of the database recovery function.

**DSNU484I** csect-name - INDEX index-name PARTITION partition-number HAS WRITE ERROR RANGE OR IS IN DEFERRED RESTART

Explanation: The attempt to externalize index 'index-name' pages partition 'partition-number' pages to the media failed.

Severity: 4 (warning)

System Action: QUIESCE processing continues.

User Response: Issue DISPLAY DATABASE to determine the exception state.

Problem Determination: Refer to Section 4 (Volume 1) of DB2 Administration Guide for a discussion of the database recovery function.

**DSNU500I** csect-name RECOVERY COMPLETE, ELAPSED TIME = hh/mm/ss

Explanation: This message is issued at the normal completion of the RECOVER utility. The time that elapsed since the beginning of the RECOVER utility to its completion was 'hh' hours, 'mm' minutes, and 'ss' seconds.

Severity: 0/4 (informational/warning)

System Action: This message indicates the normal completion of the RECOVER utility. Processing continues to the next utility statement in the utility job step, if any. If not, the utility job step is normally terminated, and the resources held become available for further processing. The UTILID of the utility job step becomes available for reuse.

---

For more detailed information, refer to the relevant sections in DB2 Administration Guide.
User Response: The recovered data is now available for further processing.
Operator Response: The recovered resources are available for further processing.

**DSNU501I**  csect-name PAGE page-number IS BEYOND END OF obj-type

Explanation: A page number was found to be beyond the end of the table space, index space, or the current data set.
Severity: 0 (informational)

System Action: The RECOVER utility terminates with return code 8 and no changes are made to the object.
User Response: Check that the image copy data set(s) in use during the RECOVER contain valid pages. If running RECOVER with the PAGE option, then resubmit the utility with the correct page specified.

**DSNU504I**  csect-name MERGE STATISTICS FOR obj-type

Explanation: This message is issued at the completion of the MERGECOPY or RECOVER utility. The message indicates the number of image copies currently processed ('cc') and the total number of pages that were merged ('nnnnn'). The same page can be obtained from more than one incremental image copy. MERGE is repeated for MERGECOPY if all of the input image copy data sets cannot be allocated and a temporary work data set has been specified.

For the RECOVER utility, MERGE is executed whether or not there are incremental image copies participating. In this case, the number of copies ('cc') is one.
The elapsed time of the MERGE is 'hh:mm:ss', hours, minutes, and seconds, respectively.
System Action: The MERGECOPY or RECOVER utility continues processing; this message is for information only.
User Response: The statistics are indicative of the processing required. For MERGECOPY, it could indicate that next time more input image copy data sets should be allocated. For example, if there was more than one MERGE pass then this message will be issued more than once. For both MERGECOPY and RECOVER, it could indicate that more frequent invocation of MERGECOPY is appropriate.

**DSNU505I**  csect-name PAGE page-number WAS NOT FOUND IN ANY IMAGE COPY DATA SET

Explanation: The page specified for 'RECOVER page' was not found in any image copy data sets.
This is an informational message only. It does not indicate termination of processing.
Severity: 0 (informational)

System Action: The RECOVER utility continues processing.
User Response: For information about using the REPAIR utility to apply changes that should have been made by the log record in error, refer to DB2 Utility Guide and Reference. Then, if you were recovering to the current point in time, resubmit the RECOVER job, specifying 'PAGE(page-number) CONTINUE'. This causes DB2 to retrieve the page from DASD and apply log records starting after the faulty one.

**DSNU503I**  csect-name PAGE page-number IS WITHIN PHYSICAL ERROR RANGE

Explanation: The page specified for 'RECOVER page' is within the physical error range of the table space partition, index space partition, or data set. 'RECOVER page' cannot be effective in this case, because the page would still be within the physical error range and therefore inaccessible to the user.
Severity: 8 (error)

System Action: The RECOVER utility terminates with return code 8. No changes are made to the table space.
User Response: Resubmit the RECOVER utility specifying 'error range'.

**DSNU506I**  csect-name OBJECT obj-qualifier.obj-name DSNUM dsnnum IS IN REORG PENDING STATE

Explanation: The RECOVER utility attempted to use the indicated full or incremental image copy data set. The attempt was unsuccessful, because an allocation or open failure occurred. This message is informational only. It does not indicate termination of processing.
# The RECOVER utility can set the REROP status if the table space contains a table that includes an identity column.
Severity: 0 (informational)
System Action: The RECOVER utility continues processing, searching for a prior image copy data set.
**DSNU507I**  
**csect-name NO USABLE BACKUP FOR RECOVER**

**Explanation:** The RECOVER utility determined that a backup was required but not found. The utility encountered one of the following situations:

- An error occurred while processing the oldest available full image copy data set. This might be the only full image copy data set available.
- While scanning backward through the SYSCOPY table, a LOAD LOG(NO) or REORG log(NO) record type was found.

Any of the following is acceptable as a backup:

- A full image copy.
- A LOAD LOG(YES).
- A REORG LOG(YES).
- For RECOVER PAGE, an incremental image copy that contains the specified page.
- A 'no record found' return from the first request for a SYSCOPY record indicates that the object was entirely populated by 'inserts'. The object will be recovered from the DB2 log if its entire history lies within the scope of the log, that is, archive log data sets containing updates for the object have not been deleted.

**Severity:** 8 (error)  
**System Action:** The RECOVER utility terminates.  
**User Response:** Re-create the object that was to be recovered.

---

**DSNU508I**  
**csect-name IN FALL BACK PROCESSING TO PRIOR FULL IMAGE COPY**

**Explanation:** One of the following occurred:

- The RECOVER utility could not allocate the most recent full image copy data set. The prior full image copy is used. Accompanying messages indicate why the image copy data set could not be allocated.
- PAGE or ERROR RANGE was specified and the recoverable point identified an image copy that was created by the DFSMSdss DUMP command with the CONCURRENT option. Such an image copy cannot be used to process PAGE or ERROR RANGE. A prior recoverable point is located.

**System Action:** The RECOVER utility continues processing, searching for the prior image copy.

---

**DSNU509I**  
**csect-name - NO ERROR RANGE TO RECOVER**

**Explanation:** The RECOVER utility was invoked to recover the existing ERROR RANGE. However, no ERROR RANGE was found.

**Severity:** 4 (warning)  
**System Action:** This message indicates the completion of the RECOVER ERROR RANGE utility. Processing continues to the next utility statement in the utility job step. If there are no more utility statements, the utility job step is normally terminated.

---

**DSNU510I**  
**csect-name NO GOOD FULL IMAGE COPY DATA SET FOR RECOVERY OF obj-type obj-qual.obj-name**

**Explanation:** It is not possible to locate a good image copy data set from which to recover. Either no back level image copy exists, or an I/O error occurred while reading the back level image copies. The return code that accompanies this message is 0 or 8 under the following conditions:

- The return code is 0 if a full image copy is not found in the SYSCOPY table during RECOVER initialization or during fall back processing. However, a LOG(YES) event was detected and recover continues from the log.
- The return code is 8 if the RECOVER utility is in fall back mode and no base recoverable point (a full image copy or LOG(YES) event) was found in the SYSCOPY table. Further utility processing is terminated.

**Severity:** 0 (informational) or 8 (error)  
**System Action:** If the return code is 0, processing continues. If the return code is 8, further utility processing is terminated.  
**User Response:** Notify the system programmer if the return code is 0, no action is required.  
**Operator Response:** If the return code is 8, the object in question should be started for utility-only processing (if it is not in this state already) until corrective action is taken. If the return code is 0, no action is required.  
**System Programmer Response:** If the return code is 8 and the object being recovered is a table space, the data must be repaired so that an image copy can be taken. An internal error might be involved, and system support might be required. If the return code is 8 and the object being recovered is an index space, then the REBUILD INDEX utility can be used to rebuild the index from the data. If the return code is 0, no action is required. Refer to Section 4 (Volume 1) of DB2 Administration Guide for a discussion of database recovery procedures.

---

**DSNU511I**  
**csect-name RECOVERY INFORMATION INDICATES THAT obj-type obj-qual.obj-name IS NOT IN A RECOVERABLE STATE**

**Explanation:** The requested recovery of an object would result in recovery entirely from the log. Because the object is also in copy pending status, recovery might fail in log apply in these situations:

- A previous MODIFY utility job deleted the last recoverable point indicated in the SYSCOPY catalog table.
- A previous MODIFY utility job deleted all SYSCOPY entries.

In either case, the MODIFY utility leaves the object in copy pending status and the RECOVER utility is unable to determine the reliability of recovery from the log.

**Severity:** 8 (error)  
**System Action:** The RECOVER utility terminates with return code 8.  
**User Response:** Determine the recoverability status of the object. SYSCOPY information is probably not useful as no recoverable point (FULL IMAGE COPY, REORG LOG(YES) or LOAD REPLACE LOG(YES)) was found by the RECOVER.
utility. User information might be the only indication about recoverability.

To allow RECOVER to execute, copy pending status must be turned off. It is safest to make a full image copy before attempting the recovery. Then run the RECOVER utility with the TORBA or TOLOGPOINT option.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051.

DSNU512I csect-name DATA SET LEVEL RECOVERY IS REQUIRED FOR

Explanation: Recovery was requested for an entire object. However, there is an image copy made for a specific data set associated with the object. Hence, the object must be recovered by data set.

Severity: 8 (error)
System Action: RECOVER completes unsuccessfully with a return code of 8.
User Response: Terminate the current RECOVER job. Then, submit a RECOVER job by specifying 'DSNUM(data set number)' for each data set for which recovery is required. Refer to DB2 Utility Guide and Reference for a discussion of RECOVERY utility constraints.

DSNU513I csect-name RECOVER UTILITY LOG APPLY RANGE IS RBAILRSN xxx TO RBAILRSN yyy

Explanation: The RECOVER utility issues this message one or more times to display the entire log range before applying updates.

Severity: 0 (informational)
System Action: Processing continues.
User Response: Refer to Section 4 (Volume 1) of DB2 Administration Guide for a discussion of database recovery procedures.

DSNU514I csect-name RECOVERY DATA DOES NOT PERMIT DSNUM(ALL) RECOVERY OF

Explanation: Recovery was requested for an entire object. If the object is a table space, then the latest activity on the entire table space was a REORG LOG (NO) or a LOAD LOG (NO). If the object is an index space, then the latest activity on the entire index space was a REORG INDEX or REBUILD INDEX. If full image copies have been taken at the data set level since then, recover the object on the data set level.

Severity: 8 (error)
System Action: RECOVER completes unsuccessfully with a return code of 8.
User Response: Submit a recover job by specifying DSNUM (data set number) for each data set requiring recovery. If the object is an index space, then the REBUILD INDEX utility may be used to rebuild the index. Refer to DB2 Utility Guide and Reference for a discussion of RECOVERY utility constraints.

DSNU515I csect-name THE IMAGE COPY DATA SET dsn WITH DATE=date AND TIME=time IS PARTICIPATING IN RECOVERY OF

obj-type obj-qual.obj-name

Explanation: This message is issued by the RECOVER utility for each participating image copy data set before it opens the data set and begins the restore process. If an error occurs while processing, the utility searches for a new recoverable base.

This message is routed to SYSOUT.
Severity: 0 (informational)
System Action: RECOVER processing continues.
User Response: Refer to DB2 Utility Guide and Reference for a discussion of RECOVERY utility constraints.

DSNU516I csect-name NO FULL IMAGE COPY AFTER LOAD OR REORG LOG(NO) OF

obj-type obj-qual.obj-name

Explanation: RECOVERY was requested for a data set of an object. If the object is a table space, then a full image copy was not taken after or during a LOAD or REORG without logging. The table space is in an unrecoverable state. If the object is an index space, then a full image copy was not taken after a REORG INDEX or REBUILD INDEX.

Severity: 8 (error)
System Action: RECOVER completes unsuccessfully with a return code of 8.
User Response: If the object is a table space, the data set is in an unrecoverable state. If the object is an index space, then the REBUILD INDEX utility may be used to rebuild the index. Notify the system programmer for corrective action.

System Programmer Response: The data should be repaired before a full image copy is taken. The recovery information for the object (use the REPORT RECOVERY utility) should be scrutinized. Refer to Section 4 (Volume 1) of DB2 Administration Guide for a discussion of database recovery procedures.
System Action: The MODIFY utility continues its termination processing.

System Programmer Response: Because DB2 no longer has any knowledge of the image copy data set, you may delete it and reuse the space. If the last full image copy was deleted, ensure that another one is taken as soon as possible.

# DSNU518I  csect-name object-type object-qualifier.object-name CONTAINS BROKEN PAGE page-number, ERROR CODE error

Explanation: A broken page, page number, was detected during execution of an image copy utility job. The copy step is terminated and the broken page is not copied to the output data set.

Severity: 8 (error)

# System Action: COPY utility ends with a return code of 8.

# User Response: The associated data set has not been copied. If the object is in the COPY-pending status, it is in an unrecoverable state. Notify the system programmer for corrective action.

System Programmer Response: Use either the RECOVER, RECOVER PAGE, or REPAIR utility to correct the broken page. Refer to Section 4 (Volume 1) of DB2 Administration Guide. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

DSNU519I  csect-name TOCOPY DATA SET NOT FOUND

Explanation: The data set specified with the keywords TOCOPY, TOVOLUME, or TOSEQNO cannot be found in the SYSCOPY table for the object to be recovered.

This may be caused by a mismatch in granularities. If the RECOVER specifies a particular DSNUM, the data set specified with the TOCOPY keyword may be for an image copy of this DSNUM or of the entire table space or index space. However, if the RECOVER is for the entire table space or index space, the specified data set must be for an image copy of the entire table space or index space.

This message may also be issued if TOVOLUME is specified for a cataloged data set.

RECOVER TOCOPY can issue DSNU519I even if the data set information was correct but the data set was not for this site. For example, if the DB2 subsystem is specified as LOCALSITE, but the TOCOPY data set information is for a RECOVERYSITE data set, this message will be issued.

Severity: 8 (error)

System Action: RECOVER processing is terminated.

User Response: Correct the input and resubmit the RECOVER job.

DSNU520I  csect-name RECOVER TO A PRIOR POINT IN TIME MIGHT LEAVE TABLE SPACE table-space-name INCONSISTENT

Explanation: RECOVER DSNUM to a previous point in time (for example, using the TOLOGPOINT option) was specified for a nonpartitioned table space. You might have recovered a data set that has different compression characteristics than the replaced data set. For example, the data set to which you recovered might have been compressed with a different dictionary.

Severity: 4 (warning)

System Action: Processing continues.

User Response: The table space might be in an inconsistent state. If the dictionary was not built with the data set that was just recovered, the results are unpredictable and might jeopardize all the data in the entire table space.

Recover all of the data sets in the table space to the same point in time. Do not ignore this message unless all data sets in this table space were recovered to the same point in time. Otherwise, the state of this nonpartitioned table space is inconsistent and unpredictable.

DSNU521I  csect-name - RECOVER UTILITY FAILED.

Explanation: Recovery was requested for a table space, index space, or data set. An attempt was made to apply changes from the DB2 log, but the necessary log records could not be read from the log data set. This message is accompanied by message DSNI007I.

Severity: 8 (error)

System Action: The RECOVER utility completes unsuccessfully with return code 8.

User Response: Consult the system programmer for corrective action.

Operator Response: Provide the console listing of the DSNI007I message for the system programmer.

System Programmer Response: Run the print log map (DSNJU004) utility. Find the data set that contains the requested RBA or LRSN from the output of the utility.

Problem Determination: If no listed data set contains the required RBA or LRSN, one of the following might have occurred:

- The data set was deleted from the bootstrap data set (BSDS) by the change log inventory (DSNJU003) utility. Rerun the utility to insert the missing data set name. DB2 must be stopped to run this utility.
- The BSDS was damaged. The BSDS can be restored using the dump and the most recent archive log data set. Run the change log inventory (DSNJU003) utility to supply changes that occurred during and after the last onload operation. Changes can be determined from the operator’s console listing.

If a listed log data set contains the required RBA or LRSN, this message is preceded by one or more DSNJxxx error messages. See the explanation of those messages for the appropriate action.

DSNU522I  csect-name RECOVER CANNOT PROCEED FOR obj-type obj-qual.obj-name BECAUSE A NON-RECOVERABLE EVENT HAS BEEN ENCOUNTERED FROM SYSCOPY WHICH HAS DBNAME=dbname TSNNAME=tsname DSNUM=dsnnum ICTYPE=ictype START_RBA=X'rb',

Explanation: Recovery was requested for an index, but activity on its table space (identified by the SYSCOPY columns) prohibits recovery. The use of an index's full image copy by recovery is prohibited by a REORG or LOAD on its underlying table space.
DSNU523I  csect-name - RECOVER UTILITY FAILED. NO FULL IMAGE COPY WAS AVAILABLE AND THE FIRST LOG RECORD WAS NOT THE REQUIRED INITIALIZATION RECORD.

Explanation: RECOVER was requested for a table space or a data set of a table space and no image copy was available. Recovery was attempted from the log and failed due to missing data set initialization records. Specifically, the log records which format space map and header pages were missing.

Severity: 8 (error)

System Action: RECOVER completes unsuccessfully with a return code of 8.

User Response: The associated data set has been reset to an empty state. Notify system programmer for corrective action.

System Programmer Response: Use the problem determination information given below to determine if a user error has occurred. If possible, correct the error and resubmit the RECOVER utility job for this table space or data set. Refer to Section 4 (Volume 1) of DB2 Reference for a discussion of possible recovery procedures.

Problem Determination: This message was preceded by message DSNU513I which identifies the log RBA range being applied. Run the print log map (DSNU004) utility for the table space in question over the indicated log RBA range.

This will show what log records are present and may assist in determining if a log data set has been damaged or deleted, or if the BSDS has been damaged. If damage to table space DSNDB01.SYSLGRNX is suspected, recover it and attempt the earlier failing recovery again.

DSNU524I  csect-name INVALID DATA SET OR PARTITION NUMBER num SPECIFIED FOR

obj-type obj-qual.obj-name

Explanation: An invalid number was specified for the data set or partition of the object named in the utility statement.

Severity: 8 (error)

System Action: Further utility processing terminates.

User Response: Correct the data set/partition number, or verify that the object name is specified correctly. Then resubmit the utility statement in a new utility job step. Refer to DB2 Utility Guide and Reference for a description of the particular utility options.

DSNU525I  csect-name RECOVERY DATA DOES NOT PERMIT DSNUM(ALL) RECOVERY OF

obj-type obj-qual.obj-name

Explanation: Recovery was requested for an entire object. However, the object is not recoverable at that level for one of the following reasons:

- The object was recovered to a point in time (for example, TOLOGPOINT was specified), which required fall back processing. However, no subsequent image copy was taken to establish a base for recovery.
- A partition of the object was recovered to a point in time after the last full image copy of the object was taken.

Severity: 8 (error)

System Action: The RECOVER utility completes unsuccessfully with return code 8.

User Response: Submit the RECOVER job with DSNUM specified for each data set for which recovery is required. Refer to DB2 Utility Guide and Reference for information about the RECOVER utility.

DSNU526I  csect-name - NO FULL IMAGE COPY AFTER PARTIAL RECOVERY OF

obj-type obj-qual.obj-name

Explanation: Recovery was requested for a data set of an object. However, an earlier point-in-time recovery (for example, using the TOLOGPOINT option) was specified and no subsequent image copy was taken to establish a base for recovery. The object is in a nonrecoverable state.

Severity: 8 (error)

System Action: The RECOVER utility completes unsuccessfully with return code 8.

User Response: The associated data set is in a nonrecoverable state. Consult the system programmer for corrective action.

System Programmer Response: You can use the RECOVER utility with the TOCOPY, TORBA, or TOLOGPOINT option to force recovery to an earlier point in time. You can use the DSN1COPY utility to restore the data set to an earlier image copy. Refer to Section 4 (Volume 1) of DB2 Administration Guide for a discussion of database recovery procedures.

DSNU527I  csect-name DB2 OBJECT REBUILT TO AN INDETERMINATE POINT

Explanation: The image copy data set specified with the TOCOPY keyword of the REBUILD utility was one of the following:

- An image copy dataset made with the SHRLEVEL CHANGE option. In this mode, changes might have been made to the object while image copy was in progress. If a change was made to a page before image copy processed the page, the update will be in the copy data set. If a change was made to a page after image copy processed it, the change will not appear in the copy data set. The data set may contain partial updates from some transactions.
- An image copy dataset made during the LOAD REPLACE utility. An image copy produced during LOAD REPLACE
If the object REBUILT is a table space, then indexes on the table space are placed in REBUILD pending status and dependent table spaces, if any, are placed in check pending status. The indexes placed in REBUILD pending are identified by message DSNU557I, and the dependent table spaces placed in check pending are identified by message DSNU563I.

System Programmer Response: Use the information in the problem determination section to determine if a user error occurred. Correct the error and resubmit the REBUILD utility for the table space. Also refer to Section 4 (Volume 1) of DB2 Administration Guide for a discussion of possible recovery procedures.

Problem Determination: Execute the REPORT RECOVERY utility for the table space at the appropriate table space or data set level (that is, DSNUM). The output shows the recovery points (SYSLGRNX records) and the update log ranges (SYSLGRNX records) that exist for the table space.

Explanation: DSNU529I is issued when more than one data set was found which satisfied these criteria.

Severity: 8 (error)

System Action: The RECOVER utility terminates with a return code of 8.

User Response: Two or more DSNU531I messages will follow this message, providing more information about each duplicate data set. Select the correct data set from the list and rerun the RECOVER job specifying a unique combination of TOCOPY, TOVOLUME and TOSEQNO.

Explanation: One or more of the TOCOPY, TOVOLUME or TOSEQNO were specified and more than one data set was found which satisfied these criteria.

Severity: 8 (error)

System Action: RECOVER completes unsuccessfully with a return code of 8.

User Response: If the TORBA or TOLOGPOINT option was specified, use the information in the problem determination section to verify that it is a valid RBA or LRSN. Correct the error and resubmit the REBUILD utility for the table space.

System Programmer Response: Use the information in the problem determination section to determine if a user error occurred. Correct the error and resubmit the REBUILD utility for the table space. Also refer to Section 4 (Volume 1) of DB2 Administration Guide for a discussion of possible recovery procedures.

Problem Determination: Execute the REPORT RECOVERY utility for the table space at the appropriate table space or data set level (that is, DSNUM). The output shows the recovery points (SYSLGRNX records) and the update log ranges (SYSLGRNX records) that exist for the table space.

Explanation: This message is issued two or more times to document the duplicate data sets detected by the RECOVER utility during TOCOPY processing. See the explanation for message DSNU530I.

Severity: 8 (error)

System Action: RECOVER completes unsuccessfully with a return code of 8.

User Response: Use the information provided in all of the DSNU531I messages to determine the correct data set for this recovery. ‘rba’, ‘date’ and ‘time’ are provided for each data set to assist in the selection. The DSNU531I message for the data set you select will provide the correct ‘vol’ and ‘fseq’ values to be specified on the TOVOLUME and TOSEQNO keywords respectively. Rerun the RECOVER job specifying TOCOPY and TOVOLUME(vol). Include the TOSEQNO(fseq) keyword if it is necessary to distinguish an unique data set.
This message is routed to SYSPRINT.

Severity: 0 (informational)

System Action: RECOVER processing continues.

---

**DSNU533I**

**csect-name - object-type obj-qual.obj-name IS A DUPLICATE OF obj-type obj-qual.obj-name**

Explanation: The utility found a duplicate object in the list. The object name may indicate a partition or piece number.

# Severity: 8 (error)

# System Action: The utility job terminates processing.

**User Response:** Correct the object list. Resubmit the job if needed.

---

**DSNU534I**

**csect-name TARGET RECOVERY POINT IS NOT A QUIESCE POINT**

Explanation: The RECOVER utility attempted to recover to a point in time (for example, using the TOLOGPOINT option) and one of the following conditions has been detected:

- The table space set is not being recovered to a quiesce point or to a common image copy SHRLEVEL(REFERENCE) point.
- Not all table spaces in the table space set have the same quiesce point.
- A table space in the set contains a dependent table with a referential constraint that was defined after the specified quiesce point.

A table space set is a group of table spaces that are referentially related or it can be a base table space and its associated LOB table spaces.

Severity: 4 (warning)

User Response: If possible, recover the table space set to a quiesce point or a common image copy SHRLEVEL(REFERENCE) point. Otherwise, use the CHECK DATA utility to check and correct referential violations. Use the CHECK DATA utility on the base table space and the CHECK LOB utility on the LOB table space(s) to validate the LOB columns.

---

**DSNU535I**

**csect-name - FOLLOWING TABLESPACES RECOVERED TO A CONSISTENT POINT**

Explanation: This message will be issued by the RECOVER utility when it determines that a table space set (a group of referentially related table spaces or a base table space and its lob table spaces) were recovered to a quiesce or to a common image copy SHRLEVEL(REFERENCE) point. All table spaces in the table space set will be listed after this message heading.

Severity: 0 (informational)

System Action: No action is taken.

---

**DSNU536I**

**csect-name - RELATIONSHIP 'r' ON TABLE 't' CREATED AFTER QUIESCE POINT**

Explanation: The relationship named 'r' was created on the dependent table, 't', after the quiesce point used for recovering to a point in time. The table space in which 't' resides is set to check pending beginning with the first record of 't'.

Severity: 4 (warning)

System Action: No action is taken.

User Response: Refer to Section 2 (Volume 1) of DB2 Administration Guide for the failure analysis procedure for the check pending state.

---

**DSNU537I**

**csect-name object-type obj-qual.obj-name IS NOT ALLOWED IN THE LIST**

Explanation: The RECOVER or COPY utility found a directory or catalog table space in a list with other table spaces or with user-defined indexes.

You cannot recover more than one directory or catalog table space in a list. Directory and catalog table spaces must be recovered individually in a particular order because the recovery of some objects depends on information derived from others. The correct order is documented in Section 4 (Volume 1) of DB2 Administration Guide. IBM-defined indexes may be specified with their associated directory or catalog table space in a list.

Severity: 8 (error)

System Action: The utility job terminates.

User Response: Remove the directory and catalog object names from the list. Then submit the COPY or RECOVER job again.

---

**DSNU538I**

**RECOVER ERROR RANGE OF DSN=dataset name ON VOLUME=volser FROM CCHH=X’cccccchhh’ TO CCHH=X’cccccchhh’ CONTAINS PHYSICAL ERROR**

Explanation: This message indicates that the error range involved in the error range recover 'dataset name' is the data set which has the physical error. The data set resides on DASD volume ‘volser’ and the error range is from track address X’cccccchhh’ to track address X’cccccchhh’.

If the error range of a data set covers more than one extent or more than one volume, then there will be one message per extent per volume.

Severity: 8 (error)

System Action: Physical I/O error is detected during error range recover, processing terminated with return code 8.

System Programmer Response: A DSNU086 message is issued to the console by DB2 while running error range recovery; this indicates that the physical error is not recovered. User must run ICKDSF or equivalent service utility to recover the physical error then re-run the error range recover again.

Problem Determination: Use the information provided by this message to run ICKDSF and then run error range recover again.
DSNU539I  csect-name - RECOVER PROCEDURES AT THE
   site-type SYSTEM

Explanation:  The RECOVER process continues at the
   RECOVERY SITE system, and/or the TRACKER SITE system.
   DB2 issues this message for informational purposes only.

Severity:  0 (informational)

System Action:  The utility continues.

DSNU540I  csect-name DYNAMIC ALLOCATION FOR
   DATA SET data-set-name WILL WAIT FOR
   UNIT TO BECOME AVAILABLE

Explanation:  A request to dynamically allocate a data set for a
   BATCH UTILITY job was refused because a unit was not
   available.  The request was repeated after setting an indicator
   in the dynamic allocation parameter list to cause the job to wait
   until a unit becomes available.

Severity:  0 (informational)

System Action:  Processing continues after a unit becomes
   available and is allocated.

DSNU541I  UNABLE TO ALLOCATE THE PRIMARY COPY
   DATASET data-set-name, BACKUP COPY IS USED

Explanation:  If RECOVER or MERGECOPY has an allo-
   cation error on the primary copy data set, it will locate the
   backup copy data set for the same system (local or recovery).
   The utility continues.

Severity:  0 (informational)

DSNU542I  csect-name - UNABLE TO OPEN THE PRIMARY COPY
   DATASET dataset-name, BACKUP COPY IS USED

Explanation:  If RECOVER or MERGECOPY has an open
   error in the primary copy data set, it will deallocate that copy
   data set and try to allocate the backup copy data set for that
   same system (local or recovery).  The utility continues.

Severity:  0 (informational)

DSNU543I  csect-name - I/O ERROR READING PAGE
   page_number IN THE PRIMARY COPY
   DATASET dataset-name, BACKUP COPY IS USED

Explanation:  If RECOVER or MERGECOPY has an I/O error
   when reading a page, with the specified page number, from the
   primary copied data set, it will locate the backup copied
   data set in that same system (local or recovery) and continue
   reading pages starting from the page number in error.

Severity:  0 (informational)

DSNU544I  csect-name - UNABLE TO OPEN THE COPY
   DATASET dataset-name FOR THE RECOVERY
   OF obj-type obj-qualifier.obj-name, RC= reason-
   code

Explanation:  RECOVER was unable to open the data set
   'dataset-name', because of 'reason-code' from the open
   abend.  The 'reason-code' is taken from field SDWAABCC in
   the SDWA.

Severity:  0 (informational)

System Action:  The RECOVER utility continues processing,
   searching for the prior image copy or applying log records.

DSNU545I  csect-name - I/O ERROR READING PAGE page-
   number IN THE COPY DATASET dataset-name
   DURING RECOVERY OF obj-type obj-qual.obj-
   name

Explanation:  An I/O error was detected while reading page
   'page-number' from copy dataset 'dataset-name'.  The
   message is issued when 1) The data set is the primary copy
   data set and there is no backup data set.  2) Open error is from
   the backup copy data set.

Severity:  0 (informational)

System Action:  The RECOVER utility continues processing,
   searching for the prior image copy or applying log records.

DSNU546I LOGONLY RECOVER CANNOT PROCEED
   BETWEEN BEGINNING RBA 'xxxxxxxxxxxxx'
   AND ENDING RBA 'yyyyyyyyyyyyy' ON DSNUM
dsnun BECAUSE A NON-RECOVERABLE
   EVENT HAS BEEN ENCOUNTERED FROM
   SYSIBM.SYSCOPY WHICH HAS
   DBNAME=database-name TSNAME= space-
   name DSNUM=dnum ICTYPE=x
   START_RBA=x'zzzzzzzzzzz'.

Explanation:  A nonrecoverable event (for example, LOAD
   LOG(NO), REORG LOG(NO)) occurred within the log range
   between the beginning log RBA or LRSN and ending log RBA
   or LRSN for the RECOVER LOGONLY utility.

This message is issued by the following CSECT: DSNUCASA

Severity:  8 (error)

System Action:  The RECOVER utility completes unsuccess-
   fully with return code 8.

System Programmer Response:  Find a proper prior point in
   time as a target recovery point and rerun the RECOVER utility
   job with the TORBA, TOCOPY, or TOLOGPOINT option.  For
   a discussion of database recovery procedures, refer to Section 4
   (Volume 1) of DB2 Administration Guide .

DSNU547I LOGONLY RECOVER CANNOT PROCEED
   BECAUSE THE STARTING
   RBA=X'xxxxxxxxxxxxx' IN THE HEADER PAGE
   PGNO=X'xxxxxxx' FOR obj-type obj-qual.obj-
   name IS INVALID.

Explanation:  One of the following occurred:

- The data set was restored from an earlier release backup
  that does not have a starting RBA or LRSN in the header
  page.
- The TORBA or TOLOGPOINT option is specified to an
  RBA or LRSN that is lower than the starting RBA or LRSN
  in the header page.

Severity:  8 (error)

System Action:  The RECOVER utility job terminates with
   return code 8.

System Programmer Response:  Use the RECOVER utility
   without the LOGONLY option, if possible, or change the RBA
   or LRSN of the TORBA or TOLOGPOINT option to a valid
   RBA or LRSN value.
**Explanation:** The Recover Utility issues one message for each DB2 object that uses only DB2 logs to recover. In a non data-sharing environment, the LOGPOINT value is specified by an RBA; in a data sharing environment it is specified by an LRSN.

**Severity:** 0 (informational)

**System Action:** RECOVER utility processing continues.

**User Response:** Use the recovery information that is available from the REPORT utility. Execute the RECOVER utility within the available recovery range.

**Explanation:** An invalid partition number nnnn was specified for index iii in the utility statement.

**Severity:** 8 (error)

**System Action:** Further utility processing is terminated.

**User Response:** Correct the partition number or verify that the index name is specified correctly, and resubmit the utility statement in a new utility job step. Refer to DB2 Utility Guide and Reference for a description of the particular utility options.

**Explanation:** When attempting to CHECK or REBUILD the indicated indexes, it was determined that duplicate index names were specified in the index name list.

**Severity:** 8 (error)

**System Action:** The utility job terminated.

**User Response:** Correct the index-name(s) in the index name list and resubmit the job.

**Explanation:** This message is issued at the normal completion of the UNLOAD phase of the REBUILD INDEX utility. It gives the number of records that were unloaded (xxxx) for the specified table space.

**Severity:** 0 (informational)

**Explanation:** A SYSCOPY record has been encountered that prohibits recovery processing. If the ICTYPE column is a: R,S,W, or X Then a SYSCOPY record for a REORG or LOAD REPLACE that redistributed data across partitions has been encountered. The partitions affected by the ALTER INDEX that changed the limit keys must be recovered in the same list.

**Severity:** 8 (error)

**System Action:** The Recover Utility terminates with RC8.
User Response: If a SYSCOPY record for a REORG or LOAD REPLACE that redistributed partition data was encountered, then add the missing partitions to the recover list using the LOWDSSNUM and HIGHDSSNUM values as a guide. For the other cases, use the REBUILD INDEX Utility to rebuild the index.

**DSNU557I csect-name -**

**obj-type obj-qual.obj-name IS IN REBUILD PENDING STATE**

**Explanation:** If the REBUILD utility issued this message, the corresponding table space to this index was REBUILDed to a point in time with keyword TOCOPY, TOLOGPOINT, or TORBA. Thus, the index was placed in REBUILD pending status.

If the REBUILD INDEX utility issued this message, the index is in REBUILD pending status. Either duplicate index entries existed during the BUILD phase of the REBUILD INDEX, or invalid KEY/RIDs, which do not belong to the partition of the cluster index, were detected. The duplicate index entries or invalid KEY/RID entries must be resolved before starting the REBUILD INDEX utility again to rebuild the index and remove the index from REBUILD pending status.

If the REORG utility with SHRLEVEL REFERENCE or CHANGE (or -TERM UTILITY) issued this message, the index is in REBUILD pending status. During the renaming of a data set during REORG, either a data set with the source name did not yet exist or a data set with the target name already existed.

**Severity:** 4 (warning) or 8 (error)

**User Response:** If the REBUILD or REORG utility (or -TERM UTILITY) issued this message, use the REBUILD INDEX utility to REBUILD this index.

If the REBUILD INDEX utility issued this message, take one of the following actions:

- Resolve the duplicate index entries or invalid keys and rerun the REBUILD INDEX utility.
- Use the REPAIR SET NORCVRPEND utility or the START DATABASE FORCE command to reset the REBUILD index and remove the index from REBUILD pending status. However, these two options will not correct the index.

**DSNU558I csect-name ALL INDEXES OF TABLESPACE= table space-name ARE IN REBUILD PENDING**

**Explanation:** The REBUILD TORBA, TOLOGPOINT, or TOCOPY utility issues this message to inform the user of the state of all indexes belonging to the REBUILDed table space.

All indexes were put in REBUILD pending status to prevent data and index inconsistency. All indexes should be REBUILDed before they are used.

**System Action:** The REBUILD utility completed successfully.

**Severity:** 4 (warning)

**User Response:** REBUILD or rebuild all indexes of the REBUILD table space.

**DSNU559I csect-name -**

**obj-type obj-qual.obj-name PARTITION partition number IS IN REBUILD PENDING STATE**

**Explanation:** If the REBUILD utility issued this message, one partition of a partitioned table space is being rebuilt to a point in time with keyword TOCOPY, TOLOGPOINT, or TORBA. The corresponding index for that partition was placed in rebuild pending status.

If the REBUILD INDEX utility issued this message, the index or the partition of a cluster index is in rebuild pending status. Either duplicate index entries existed during the BUILD phase of the REBUILD INDEX or INDEX PART, or invalid KEY/RIDs, which do not belong to the partition of the cluster index, were detected. The duplicate index entries or invalid KEY/RID entries must be resolved before starting the REBUILD INDEX utility again to rebuild the index and remove the index from rebuild pending status.

If the REORG utility with SHRLEVEL REFERENCE or CHANGE (or -TERM UTILITY) issued this message, one partition of a partitioned index was placed in rebuild pending status. During the renaming of a data set during REORG, either a data set with the source name did not yet exist or a data set with the target name already existed.

**Severity:** 4 (warning)

**User Response:** If the REBUILD or REORG utility (or -TERM UTILITY) issued the message, rebuild this index with the REBUILD INDEX utility.

If the REBUILD INDEX utility issued this message, take one of the following actions:

- Resolve duplicate index entries or invalid keys and rerun the REBUILD INDEX utility.
- Use the REPAIR SET NORCVRPEND utility or START DATABASE FORCE command to reset the rebuild pending status. However, these two options will not correct the index.

**DSNU560I csect-name - TABLESPACE= database.tablespace PART= partition number IS IN RECOVERY PENDING STATE**

**Explanation:** The table space partition of a table space on which the utility was running is in recovery pending status. A RECOVER TABLESPACE at the partition level is required.

**Severity:** 4 (warning)

**System Action:** No action is taken.

**User Response:** Take one of the following actions:

- Run the RECOVER TABLESPACE utility on the table space partition.
- Run the LOAD REPLACE utility on the table space partition.
- Use the REPAIR SET NORCVRPEND utility or the START DATABASE FORCE command to reset the recovery pending status. However, these two options will not correct the table space.
DSNU561I  csect-name -

    obj-type obj-qual.obj-name PARTITION part-number IS IN CHECK PENDING

Explanation: This message is issued to report the check pending state of the specified partition.

Severity:  4 (warning)

User Response: If the object is a table space partition with referential relationships, then run the CHECK DATA utility to check for referential integrity violations.

If the object is a base table space partition, then run the CHECK DATA utility to validate the auxiliary columns.

If the object is an index space partition, then run the CHECK INDEX utility to verify that the index keys are consistent with the data in the table space partition.

Correct all errors before attempting to use the object again.

DSNU562I  csect - TABLESPACE database.tablespace IS IN RECOVERY PENDING

Explanation: The table space against which the utility was running is in recovery pending status. A RECOVER TABLESPACE is required.

Severity:  4 (warning)

System Action: No action is taken.

User Response: Take one of the following actions:

- Run the RECOVER TABLESPACE utility on the table space.
- Run the LOAD REPLACE utility on the table space.
- Use the REPAIR SET NORCVRPEND utility or the START DATABASE FORCE command to reset the recovery pending status. However, these two options will not correct the table space.

DSNU563I  csect name -

    obj-type obj-qual.obj-name IS IN CHECK PENDING

Explanation: This message is issued to report the check pending state of the specified object.

Severity:  4 (warning)

User Response: If the object is a table space with referential relationships, then run the CHECK DATA utility to check for referential integrity violations.

If the object is a base table space with LOB columns, then run the CHECK DATA utility to validate the auxiliary columns.

If the object is a LOB table space, then run the CHECK LOB utility to validate the structure of the LOB table space.

If the object is an index space, then run the CHECK INDEX utility to verify that the index keys are consistent with the data in the table space or table space partition.

Correct all errors before attempting to use the object again.

DSNU564I  csect - RESTART NOT ALLOWED FOR

    obj-type obj-qual.obj-name

Explanation: Restart of the RECOVER utility is not allowed for one of the following reasons:

1. During the RESTORE phase, access to image copies failed. Therefore, RECOVER determined an earlier point of recovery to search for available image copies. RECOVER might not be able to recreate the original failures for restart.

2. The utility uses the LOGONLY option and was previously restarted with RESTART(CURRENT). It cannot now be started with RESTART(PHASE).

Severity:  8 (error)

System Action: The utility job terminates. If RECOVER acts on a list of objects, the restarted job terminates with the first object for which restart is not allowed.

User Response: For case 1, execute REPORT RECOVERY on the object and also collect the output from the previous execution of RECOVER TABLESPACE. Using those two outputs and the console log, determine the reason for the failure during the RESTORE phase. Correct the reason for the failure, if necessary. Terminate the outstanding utility then rerun the RECOVER TABLESPACE without RESTART.

For case 2, restart the utility with RESTART(CURRENT) or restore the data sets and rerun the RECOVER job from the beginning.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051.

DSNU565I  csect-name CHECK CONSTRAINT constraint-name ON TABLE table-name WAS CREATED AFTER THE TARGET RECOVERY POINT

Explanation: The check constraint constraint-name was created on table table-name after the target recovery point. The target recovery point is the specified time or RBA in the point-in-time recovery. The associated table space was placed in check pending status because the RECOVER utility cannot determine whether check integrity was maintained. Data in the table might have constraint violations.

Severity:  4 (warning)

System Action: RECOVER processing continues.

User Response: Refer to Section 2 (Volume 1) of DB2 Administration Guide for information about resolving the check pending status.

DSNU566I  csect-name RESTORE OF obj-type obj-qual.obj-name FROM DATA SET data-set-name COMPLETED, ELAPSED TIME = hhmmss

Explanation: This message is issued at the successful completion of the RESTORE phase of the RECOVER utility when the DFSMSdss RESTORE command is issued. The data-set-name identifies the DFSMS concurrent copy that was being restored. The elapsed time of the RESTORE is shown in hours, minutes, and seconds.

System Action: RECOVER utility processing continues.

User Response: No action is required.
**DSNU567I**

**csect-name TABLESPACE= dbname.tname**

**PART NUMBER = partition number IS IN REORG PENDING STATE**

**Explanation:** A SYSCOPY record for a range of partitions has been encountered. The RECOVER TABLESPACE utility was executed against an object which was the target of a partition rebalancing. The RECOVER utility will set all of the partitions involved in the partition rebalancing to REORG PENDING for one of the following reasons:

- Recovery of a table space to a point in time prior to the resetting of the REORG PENDING state by the REORG utility.
- Recovery of a table space to currency, when the table space is in REORG PENDING state.

**Severity:** 4 (warning)

**System Action:** The RECOVER utility completed successfully.

**User Response:** Execute REORG with SHRLEVEL NONE on the partitions in REORG PENDING status to rebalance the partitions and to remove the REORG PENDING state.

---

**DSNU568I**

**csect-name obj-type obj-qual.obj-name IS IN INFORMATIONAL COPY PENDING**

**Explanation:** An image copy of the index is required to establish a new base from which the index can be recovered. This is an advisory state, so the index is available for read or write access.

**Severity:** 4 (warning)

**User Response:** Take an image copy of the index.

---

**DSNU569I**

**csect-name RESTORE OF obj-type obj-qual.obj-name FROM DATA SET data-set-name FAILED WITH RETURN CODE return-code**

**Explanation:** This message is issued in the RESTORE phase of the RECOVER utility. The DFSMSdss RESTORE command was issued to restore the DFSMS concurrent copy named data-set-name. The return code is from DFSMSdss RESTORE.

**Severity:** 4 (warning)

**System Action:** The RECOVER utility searches for the next recoverable point. DFSMSdss issues ADR messages to the job output to indicate the reason for the return code.

**User Response:** You might want to investigate why this DFSMS RESTORE command failed. Collect any console messages. Look up the return code and any ADR messages in the appropriate DFSMSdss manual.

**Problem Determination:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B: "Problem determination" on page 1051. 1, 85.

---

**DSNU570I**

**csect-name obj-type obj-qual.obj-name PARTITION part-num IS IN INFORMATIONAL COPY PENDING**

**Explanation:** An image copy of the index partition is required to establish a new base from which the index partition can be recovered. This is an advisory state, so the index is available for read or write access.

**Severity:** 4 (warning)

**User Response:** Take an image copy of the index partition or of the entire index, depending on your backup and recovery procedures.

---

**DSNU571I**

**csect-name ALL site SYSCOPY RECORDS FOR obj-type=**

**obj-qual.obj-name PARTITION=part-num HAVE BEEN DELETED**

**Explanation:** The MODIFY RECOVERY utility deleted all of the SYSCOPY table records for the specified table space or index space partition. Any related SYSLGRNX rows are deleted if DSNUM ALL is specified. The 'part-num' of specified table space or index space is no longer recoverable at the 'site'. The 'site' can be 'LOCALSITE' or 'RECOVERYSITE'.

**Severity:** 4 (warning)

**System Action:** Utility processing continues.

**System Programmer Response:** The 'part-num' of specified table space or index space is no longer recoverable at the 'site' after this message is received. Use the COPY utility to create one or more copies for the 'site' to establish a base for future recovery.

---

**DSNU572I**

**csect-name ALL site SYSCOPY RECORDS FOR obj-type=**

**obj-qual.obj-name HAVE BEEN DELETED**

**Explanation:** The MODIFY RECOVERY utility deleted all of the SYSCOPY table records for the specified table space or index space. Any related SYSLGRNX rows are deleted if DSNUM ALL is specified. The table space or index space is no longer recoverable at the 'site'. The 'site' can be 'LOCALSITE' or 'RECOVERYSITE'.

**Severity:** 4 (warning)

**System Action:** Utility processing continues.

**System Programmer Response:** The table space or index space is no longer recoverable at the 'site' after this message is received. Use the COPY utility to create one or more copies for the 'site' to establish a base for future recovery.

---

**DSNU573I**

**csect-name NO BACKUP COPIES FOUND FOR THIS TABLESPACE OR DATASET**

**Explanation:** The MODIFY RECOVERY utility was unable to locate any SYSCOPY records older than the specified AGE prior to the specified DATE. No records have been deleted.

**Severity:** 4 (warning)

**System Action:** Processing completes normally.
DSNU575I  csect-name - MODIFY COMPLETED SUCCESSFULLY

Explanation: This message reports the successful completion of the MODIFY utility. The requested cleanup of old SYSIBM.SYSCOPY entries was completed.

Severity: 0 (informational)
System Action: The MODIFY utility completed normally.

DSNU577I  csect-name MODIFY HAS NOT DELETED ALL SYSCOPY RECORDS AS REQUESTED.

Explanation: If MODIFY RECOVERY is invoked with a partition-number (DSNUM), and the table space level recoverable point is older than the user specified DATE or AGE, all SYSCOPY records after the table space level recoverable point cannot be deleted.

Severity: 4 (warning)
System Action: Processing continues normally.

DSNU578I  csect-name SYSLGRNX INFORMATION FOR MEMBER member-name

Explanation: In the data sharing environment, the SYSLGRNX records reported with DSNU513 are grouped by the respective member name. Each group member has header message DSNU578 to identify the member. This message precedes DSNU513.

System Action: The RECOVER utility continues with the LOGAPPLY phase.

DSNU579I  csect-name RECOVER UTILITY LOG APPLY AT LOGPOINT xxx

Explanation: This message shows the progress of the LOGAPPLY phase of the RECOVER utility. The highest LOGPOINT that was applied is xxx. The value of logpoint is RBA in a non data-sharing environment and LRSN in a data sharing environment.

System Action: The LOGAPPLY phase continues normally.

DSNU580I  csect-name REPORT UTILITY COMPLETE, ELAPSED TIME=hh/mm/ss

Explanation: The message is issued at the normal completion of the REPORT utility. The time that elapsed since the beginning of the REPORT utility to its completion was ‘hh’ hours, ‘mm’ minutes, and ‘ss’ seconds.

Severity: 0 (informational)
System Action: This message indicates the normal completion of the REPORT utility. Processing continues to the next utility statement in the utility job step, if any. If not, the utility job step is normally terminated, and the resources held become available for further processing. The UTILID of the utility job step becomes available for reuse.

DSNU581I  csect-name REPORT RECOVERY

Explanation: This message indicates the beginning of the recovery information report for a table space or index space.

Severity: 0 (informational)
System Action: Utility processing continues.

DSNU582I  csect-name REPORT RECOVERY

Explanation: This is the header message for the SYSCOPY section of the REPORT RECOVERY output. This section displays the SYSCOPY rows for the table space or index space. Whether the information is displayed at the partition level is determined by the DSNUM specification in the REPORT RECOVERY input statement. The fields in the SYSCOPY row are:

- TIMESTAMP
- ICTYPE
  The following delimiters may be present around the ICTYPE value: " " - Non image copy syscopy entry < > - Image copy prior to rebalancing of table space partitions ( ) - Image copy prior to LOG(NO) event. Note that for image copies of indexes, the LOG(NO) event may have occurred on its underlying table space.
- DSNUM
- FILESEQNO
- START_RBA
- SHRLEVEL
- DEVTYPE
- ICBACKUP
- DSNAME
- STYPE
- PIT_RBA
- DSVOLSER
- HIGHDSNUM
- LOWDSNUM

For description of the fields, see SYSIBM.SYSCOPY table in Appendix C of DB2 SQL Reference.

Severity: 0 (informational)

DSNU583I  csect-name SYSLGRNX ROWS FROM REPORT RECOVERY FOR

Explanation: This is the header message for the SYSLGRNX section of the REPORT RECOVERY output. This section displays the SYSLGRNX rows for the table space, index space, or partition as specified in the REPORT RECOVERY input statement. The fields in the SYSLGRNX row are:

- UCDATE - Modification date
- UCTIME - Modification time
- START RBA - Starting RBA
- STOP RBA - Stopping RBA
- START LRSN - Starting LRSN
- STOP LRSN - Stopping LRSN
- DSNUM - Partition number
- MEMBER - Data sharing member

An invalid SYSLGRNX record is marked with "**" at the end. The invalid SYSLGRNX record cannot be used for recovery.

Severity: 0 (informational)
because the range is outside recovery. If records are marked with ‘**’, then a DSNU594 message should have been issued prior to this.

A SYSLGRTNX record created after the last FULL IMAGE COPY, LOAD REPLACE LOG YES, or REORG LOG YES is marked with ‘**’ at the end.

Severity: 0 (informational)
System Action: Processing continues normally.

---

**DSNU584I** csect-name REPORT RECOVERY

**obj-type obj-qual.obj-name BSIDS VOLUMES**

Explanation: Message for the BSIDS VOLUMES section of the REPORT RECOVERY output. This section contains BSIDS volumes for the archive log (1 or 2) records associated with the table space or index space specified in the REPORT RECOVERY input statement. The output contains the following information:

<table>
<thead>
<tr>
<th>START TIME</th>
<th>END TIME</th>
<th>START RBA</th>
<th>END RBA</th>
<th>UNIT</th>
<th>VOLSER</th>
<th>DATA SET NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>timestamp</td>
<td>timestamp</td>
<td>rba</td>
<td>rba</td>
<td>device</td>
<td>volume</td>
<td>data set name</td>
</tr>
</tbody>
</table>

An archive log record created after the last FULL IMAGE COPY, LOAD REPLACE LOG YES, or REORG LOG YES is marked with ‘*’ at the end.

System Action: Processing continues normally

---

**DSNU585I** csect-name REPORT RECOVERY

**obj-type obj-qual.obj-name CURRENT**

Explanation: The message is issued in response to the CURRENT option of REPORT RECOVERY utility. It indicates that only the information since the last recoverable point for the specified table space or index space is reported.

Severity: 0 (informational)
System Action: Normal utility processing continues.

---

**DSNU586I** csect-name REPORT RECOVERY

**obj-type obj-qual.obj-name SUMMARY:**

Explanation: This is the header message for the SUMMARY section of the REPORT RECOVERY utility. All the volumes to be used by the RECOVERY utility are summarized.

The volume name is marked with ‘*’ at the end if any archive log record in the volume was created after the last FULL IMAGE COPY, LOAD REPLACE LOG YES, or REORG LOG YES.

System Action: Processing continues normally

---

**DSNU587I** csect-name REPORT TABLESPACE SET WITH TABLESPACE dbname.tspace

Explanation: Header message for the REPORT TABLESPACESET output. The output contains all table spaces, tables, and dependent tables associated with the table space specified in the REPORT TABLESPACESET input statement.

Severity: 0 (informational)
System Action: Utility processing continues normally.

---

**DSNU588I** csect-name NO DATA TO BE REPORTED

Explanation: The message is issued when no data can be found for a section of the REPORT output.

Severity: 0 (informational)
System Action: Utility processing continues.

---

**DSNU589I** csect-name REPORT RECOVERY

**obj-type obj-qual.obj-name COMPLETE**

Explanation: The message is issued at the normal completion of reporting the RECOVERY information for the table space or index space by the REPORT RECOVERY utility.

Severity: 0 (informational)
System Action: This message indicates the normal completion of the REPORT RECOVERY utility. Processing continues to the next utility statement in the utility job step, if any. If not, the utility job step is normally terminated, and the resources held become available for further processing. The UTILID of the utility job step becomes available for reuse. The output from REPORT RECOVERY is now available for RECOVER utility use.

---

**DSNU590I** csect-name object RESOURCE NOT AVAILABLE - object-name REASON = X'reason-code'

Explanation: A required object could not be accessed because of the reason shown in ‘reason-code’. The ‘object-name’ can be a database, table space, or index space. If the object is in a stopped state and has partitions, then the stopped state applies to one or more of the partitions.

Severity: 8 (error) or 4 (warning)
System Action: If the return code is 8, utility processing is terminated. If the return code is 4, utility processing continues to the next request.

User Response: Determine the cause for unavailability. The DISPLAY DATABASE command can be used to determine the status. After ensuring the object is available, resubmit the job.

---

**DSNU591I** csectname AN UNSUCCESSFUL COMPLETION OF A LOG READ, REASON=X'reason-code'

Explanation: The log manager subcomponent of DB2 detected an error during a LOG READ of SYSCOPY record for DSNDB06.SYSCOPY, DSNDB01.DBDB01 or DSNDB01.SYSUTIL.

Severity: 4 (warning)
System Action: Processing continues.

Problem Determination: Look up the reason code in Section 4. DB2 Codes on page 577 of this book for problem determination.

---

**DSNU592I** csect-name REPORT RECOVERY INFORMATION FOR DATA SHARING MEMBER member-name

Explanation: The REPORT RECOVERY utility displays this message as the heading for SYSGLGRNX and BSDS records or BSDS summary information for each data sharing member. Records for this member follow, if there is data to report.

Severity: 0 (Informational)
**DSNU593I**  
**csect-name REPORT RECOVERY ENVIRONMENT INFORMATION: MINIMUM RBA: rba1**  
**MAXIMUM RBA: rba2 MIGRATING RBA: rba3**  

**Explanation:** The REPORT utility issues this message to display recovery environment information used by the RECOVER utility. The maximum and minimum RBAs give the range of possible recovery points on the log before the start of data sharing. The migrating RBA is the RBA at the time of migration from DB2 Version 3 to Version 4. If there is data to report, other messages from the REPORT utility follow to display SYSCOPY, SYSLGRNX and BSDS records.  

**Severity:** 0 (Informational)  
**System Action:** Utility processing continues.  

---  

**DSNU594I**  
**csect-name DB2 ENCOUNTERED SYSLGRNX RECORDS THAT CANNOT BE USED FOR RECOVERY.**  

**Explanation:** The utility found one or more SYSLGRNX records that cannot be used for recovery because the range is outside recovery. Invalid SYSLGRNX records are marked with **"** at the end of the record under message DSNU583I.  

**Severity:** 4 (REPORT - warning) or 8 (RECOVER - error)  
**System Action:** REPORT utility processing continues. RECOVER utility terminates.  
**System Programmer Response:** Run the RECOVER utility with the TOCOPY option.  

---  

**DSNU595I**  
**csect-name ERROR IN GETTING THE HIGHEST MEMBER ID IN DATA SHARING.**  

**Explanation:** The REPORT utility could not find a valid highest member ID. The highest member is the last member to join a data sharing group. This message is issued only in a data sharing environment.  

**Severity:** 8 (error)  
**System Action:** The REPORT utility abends.  
**System Programmer Response:** This might be an internal DB2 problem. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.  

---  

**DSNU596I**  
**csect-name ERROR IN GETTING THE MEMBER NAME FOR MEMBER ID**  

**Explanation:** The REPORT utility could not find a valid member name for the member ID, or the member ID supplied is invalid. This message is issued only in a data sharing environment.  

**Severity:** 8 (error)  
**System Action:** The REPORT utility abends.  
**System Programmer Response:** This might be a DB2 internal problem. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.  

---  

**DSNU597I**  
**csect-name INVALID SYSLGRNX INFORMATION FROM REPORT RECOVERY**  

**Explanation:** This is the header message for the invalid SYSLGRNX records section of the REPORT RECOVERY output. This section lists SYSLGRNX records containing information that is invalid for recovery purposes.  

**Severity:** 0 (Informational)  
**System Action:** Utility processing continues.  
**User Response:** Examine the invalid SYSLGRNX records with a zero member ID which were generated before enabling data sharing. The MODIFY utility can be used to delete the invalid SYSLGRNX records.  

---  

**DSNU599I**  
**csect-name obj-type obj-qual.obj-name HAS BEEN RECOVERED TO A CONSISTENT POINT IN TIME WITH obj-type obj-qual.obj-name**  

**Explanation:** This message is issued when an index and its underlying table space have been recovered to a consistent point in time. A consistent point in time is a common QUIESCE point or a common SHRLEVEL REFERENCE copy set (objects were copied in the same list with SHRLEVEL REFERENCE specified). The index is available for read and write access when the recover completes.  

**Severity:** 0 (informational)  
**System Action:** Recover processing continues.  

---  

**DSNU600I**  
**csect-name INDEX creator,index-name POINTS TO A DIFFERENT DATABASE.**  

**Explanation:** A specified index does not point to a table in the database selected. For a RUNSTATS Format 1 invocation, the database is the one specified (or defaulted) in the TABLESPACE parameter. For a RUNSTATS Format 2 invocation, the database is the one which contains the first index in the index-name list.  

**Severity:** 8 (error)  
**System Action:** All remaining RUNSTATS invocation parameters are validated and the executing utility job terminates. Work performed by previous utilities in the job step remains in effect. Subsequent utility control statements are flushed. No record of the utility job step is retained in the system; therefore, it cannot be restarted.  
**User Response:** Ensure that all indexes in the list point to the same database and resubmit the RUNSTATS job.  
**Problem Determination:** Refer to catalog table SYSIBM.SYSINDEXES to determine the table upon which the index is based. This table must be in the database and table space targeted by the RUNSTATS utility.  

---  

**DSNU601I**  
**csect-name INDEX creator,index-name POINTS TO A DIFFERENT TABLESPACE.**  

**Explanation:** A specified index does not point to a table in the table space selected. The table space is either the one specified in the TABLESPACE parameter or the one which contains the table pointed to by the first specified index.  

**Severity:** 8 (error)  
**System Action:** All remaining RUNSTATS invocation parameters are validated and the executing utility job terminates. Work performed by previous utilities in the job step remains in effect. Subsequent utility control statements are flushed. No
record of the utility job step is retained in the system; therefore, it cannot be restarted.

**User Response:** Ensure that all indexes in the list point to tables in the targeted table space and resubmit the RUNSTATS job.

**Problem Determination:** Refer to catalog table SYSIBM.SYINDEXES to determine the table upon which the index is based. Using the table-name found in SYSIBM.SYINDEXES, refer to catalog table SYSIBM.SYSTABLES to determine the containing table space.

**Explanation:** For a LOAD or REORG utility when a nonpartitioned index exists, inline statistics performs a complete index scan. Statistics are collected for the entire nonpartitioned index. This warning message will be issued if the PART keyword & STATISTICS keyword are specified for LOAD/REORG utilities. This is because statistics are not collected on a logical part basis.

**Severity:** 4 (warning)

**User Response:** Run the runstats utility on the object.

**Explanation:** The identified object (TABLE or TABLESPACE) does not have a complete definition. This can be caused by one of these errors:
- Not defining any tables in the table space (RC=4).
- Not creating the accompanying partitioned index if the table space is partitioned (RC=8).

**Severity:** 8 (error) or 4 (warning)

**System Action:** If the return code is 8, utility processing terminates. If the return code is 4, utility processing continues to the next request.

**User Response:** Complete the table space definition by creating at least one table in the table space, or create the accompanying partitioned index if the table space is partitioned.

**Problem Determination:** Issue an SQL SELECT statement on the catalog to determine if the tables or a partitioned index was not created for the table space.

**Explanation:** The object currently to be scanned by the RUNSTATS utility contains no records. The 'object' can be TABLESPACE or INDEXSPACE.

**Severity:** 0 (informational)

**System Action:** The object currently to be scanned is recorded in the catalog as empty. The statistics for the object are updated and RUNSTATS continues to the next object, if there is one.
**DSNU608I**  csect-name USER NOT AUTHORIZED TO ACCESS INDEXSPACE creator.index-name

**Explanation:** This user is not authorized to execute the RUNSTATS utility against INDEXSPACE 'creator.indexspacename'.

**Severity:** 8 (error)

**System Action:** The executing utility job step terminates. Work performed by previous utilities in the job step remains in effect. Subsequent utility control statements are flushed. No record of the utility job step is retained by the system; therefore, it cannot be restarted.

**User Response:** Contact your system administrator to obtain the proper authority, or have another user with the required authority execute the utility for you.

**Problem Determination:** Refer to the catalog table SYSIBM.SYSCOLUMNS to determine the table space in which the table is located.

**DSNU609I**  csect-name TABLE table-name IS IN A DIFFERENT TABLESPACE

**Explanation:** A table listed in the table name list of the RUNSTATS TABLE keyword was not found in the specified table space.

**Severity:** 8 (error)

**System Action:** The executing utility job step terminates. Work performed by previous utilities in the job step remains in effect. Subsequent utility control statements are flushed. No record of the utility job step is retained by the system; therefore, it cannot be restarted.

**User Response:** Ensure that all tables in the list are in the specified table space and resubmit the utility.

**Problem Determination:** Refer to the catalog table SYSIBM.SYSTABLES to determine the table space in which the table is located.

**DSNU610I**  csect-name catalog-table-name CATALOG UPDATE FOR object-name SUCCESSFUL

**Explanation:** This message indicates that the updating of the statistics columns in the CATALOG TABLE 'catalog-table-name' was successful.

**Severity:** 0 (informational)

**System Action:** Processing continues with the next catalog table.

**DSNU611I**  csect-name COLUMN column-name NOT FOUND FOR TABLE creator.table-name

**Explanation:** A column name, given as an operand of the COLUMN keyword, was not found in the specified table.

**Severity:** 8 (error)

**System Action:** Validation of the utility invocation statement is completed and the executing utility job step is terminated.

**User Response:** Ensure that the column name given in the message is correct for the table specified.

**Problem Determination:** Check that the column name specified in the utility invocation statement is identical to that found in the SYSIBM.SYSCOLUMNS catalog table. Correct any errors and reissue the utility job.

**DSNU612I**  csect-name SYSTABLESPACE CATALOG STATISTICS FOR tspace-name NACTIVE = nactive

**Explanation:** The RUNSTATS utility issues this message to report the statistics collected for table space tspace-name.

nactive  The number of active pages in the table space

This message is routed to SYSPRINT.

**Severity:** 0 (informational)

**System Action:** RUNSTATS processing continues.

**User Response:** Refer to DB2 Utility Guide and Reference for information about RUNSTATS statistics.

**DSNU613I**  csect-name SYSTABLEPART CATALOG STATISTICS FOR table-space-name PARTITION part-num

**Explanation:** The RUNSTATS utility issues this message to report the statistics collected. If the part-num equals 0, the statistics apply to the entire table space. If the part-num is not 0, the statistics apply to the specified partition of the table space.

**Severity:** 0 (informational)

**System Action:** RUNSTATS processing continues.

**User Response:** Refer to DB2 Utility Guide and Reference for information about RUNSTATS statistics.

### Statistics Descriptions

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>cardinality</td>
<td>The number of rows in the reported partition number</td>
</tr>
<tr>
<td>nearindref</td>
<td>The number of rows that were relocated near their original page</td>
</tr>
<tr>
<td>farindref</td>
<td>The number of rows that were relocated far from their original page</td>
</tr>
<tr>
<td>peractive</td>
<td>The percentage of space occupied by actual data from active tables</td>
</tr>
<tr>
<td>percdrop</td>
<td>The percentage of space occupied by rows of data from dropped tables</td>
</tr>
<tr>
<td>pagesave</td>
<td>The percentage of pages saved in the table space or partition by using data compression</td>
</tr>
<tr>
<td>pqty</td>
<td>The primary space allocation for the dataset in 4K blocks.</td>
</tr>
<tr>
<td>sqty</td>
<td>The secondary space allocation for the dataset in 4K blocks.</td>
</tr>
<tr>
<td>space</td>
<td>The number of kilobytes of space currently allocated for all extents.</td>
</tr>
</tbody>
</table>
**DSNU614I**  
*csect-name SYSTABLES CATALOG STATISTICS FOR table-name*

| CARD | = cardinality |
| CARDF | = cardinality |
| NPAGES | = npages |
| PCTPAGES | = pctpages |
| PCTROWCOMP | = pctrowcomp |

**Explanation:** The RUNSTATS utility issues this message to report the statistics collected for the specified table. The statistics follow:

- **cardinality**: The number of rows in the table
- **npages**: The number of pages on which rows of the table appear
- **pctpages**: The percentage of total pages of the table space that contain rows from this table
- **pctrowcomp**: The percentage of rows compressed within the total number of active rows in the table

For a LARGE table space, the value of CARD is set to -1.

RUNSTATS uses floating point fields to report these statistics.

**Severity:** 0 (informational)

**System Action:** RUNSTATS processing continues.

**User Response:** Refer to DB2 Utility Guide and Reference for a discussion of RUNSTATS statistics.

**DSNU615I**  
*csect-name SYSCOLUMNS CATALOG STATISTICS FOR column-name*

| COLCARD | = cardinality |
| COLCARDF | = cardinality |
| HIGH2KEY | = high2key |
| LOW2KEY | = low2key |

**Explanation:** The RUNSTATS utility issues this message to report the statistics collected for column 'column-name'. Message DSNU619I is issued to identify the table.

- **cardinality**: The number of distinct values in the column
- **high2key**: The second highest value of the column
- **low2key**: The second lowest value of the column

If the values for 'high2key' and 'low2key' are null, the invoker of RUNSTATS is not authorized to read the table.

For a LARGE table space, the value of COLCARD is set to -1.

RUNSTATS uses floating point fields to report these statistics.

**Severity:** 0 (informational)

**System Action:** Processing continues.

**User Response:** Refer to DB2 Utility Guide and Reference for a description of RUNSTATS statistics.

**DSNU616I**  
*csect-name SYSCOLDIST CATALOG STATISTICS FOR column-name ...

| CARDINALITY | = cardinality |

**Explanation:** The RUNSTATS utility issues this message to report the statistics collected for the indexed column 'column-name'. If more than one column is listed, then the statistics collected and the column values reported represent the concatenation of those columns.

- The value for CARDINALITY is the number of distinct values for the listed columns. This statistic appears only if the KEYCARD option was specified.

The values under FREQUENCY are the same as those that are inserted into the DB2 catalog. Consider each 'frequency' as a four-digit number with an implied decimal point two places to the left of the final digit. The resulting number is the percentage of total rows in the table that contain a particular value for the named index columns.

Frequency is associated with the occurrence of a single value which is listed under COLVALUE.

Frequencies for the most frequent values are collected by default, or if the FREQVAL option is specified and given a COUNT value greater than zero. If the default is taken, then the ten most frequently occurring values are reported in descending order of frequency.

If fewer than ten values appear, then there are fewer than ten distinct values in the index.

If no values appear, then the values are uniformly distributed.

If frequencies appear but column values do not, then the invoker of RUNSTATS is not authorized to read the table. Message DSNU619I is issued to identify the table.

This message is routed to SYSPRINT.

**Severity:** 0 (informational)

**System Action:** Processing continues.

**User Response:** Refer to DB2 Utility Guide and Reference for a description of RUNSTATS statistics.

**DSNU617I**  
*csect-name SYSINDEXES CATALOG STATISTICS FOR index-name*

| CLUSTERED | = clustered |
| CLUSTERRATIO | = cluster-ratio |
| CLUSTERRATIOF | = float-cluster-ratio |
| FIRSTKEYCARD | = first-key |
| FIRSTKEYCARDF | = first-key |
| FULLKEYCARDF | = full-key |
| NLEAF | = nleaf |
| NLEVELS | = nlevels |

**Explanation:** The RUNSTATS utility issues this message to report the statistics collected for index 'index-name'.

- **clustered**: Whether the table is actually clustered by this index (YES or NO)
- **cluster-ratio**: The percentage of data rows that are in clustering order for this index
float-cluster-ratio: A number between 0 and 1 that when multiplied by 100 gives the percentage of data rows in the partition that are in clustering order for this index.

first-key: The number of distinct values of the first key column.

full-key: The number of distinct values of the key.

nleaf: The number of active leaf pages in the index.

nlevels: The number of levels in the index tree.

For a LARGE table space, the values of FIRSTKEYCARD and FULLKEYCARD are set to -1. RUNSTATS uses floating point fields to report these statistics.

This message is routed to SYSPRINT.

Severity: 0 (informational)
System Action: Processing continues.
User Response: Refer to DB2 Utility Guide and Reference for a description of RUNSTATS statistics.

DSNU619I csect-name - USER auth_id DOES NOT HAVE PRIVILEGE ON TABLE table_name

Explanation: The RUNSTATS utility issues this message to report that authorization ID ‘auth_id’ does not have privilege on table ‘table_name’. Some column values reported by messages DSNU615I, DSNU616I, DSNU625I, and DSNU626I contain the null value.

Severity: 0 (informational)
System Action: RUNSTATS processing continues.
User Response: To obtain the key values, the user must be granted authority on the table. The RUNSTATS utility can be rerun with the report option.

DSNU620I csect-name RUNSTATS CATALOG STATISTICS STATSTIME = timestamp

Explanation: The RUNSTATS utility issues this message to report the timestamp value when statistics were collected. The value ‘timestamp’ is common to all of the statistic tables that were updated.

Severity: 0 (informational)
System Action: Processing continues.
User Response: Refer to DB2 Utility Guide and Reference for a description of the RUNSTATS statistics.

DSNU621I csect-name RUNSTATS COMMIT/ROLLBACK FAILED

Explanation: The RUNSTATS utility updated the catalog with gathered statistics and has tried either to commit those changes or to perform rollback processing to remove them following an error. The commit or rollback failed.

Severity: 8 (error)
System Action: RUNSTATS processing is terminated. Subsequent utility control statements in the utility job step are executed.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: This is an internal error.

Severity: 4 (warning)
User Response: Run the runstats utility against the object.
DSNU623I  csect-name - catalog-table-name CATALOG NOT UPDATED WITH AGGREGATE STATISTICS FOR object-name BECAUSE SOME PARTITIONS HAVE NO VALID STATISTICS

Explanation:  Aggregate statistics were requested, but partition statistics do not exist for every partition.  Without partition statistics, the aggregate statistics cannot be calculated.  The statistics for ‘object-name’ are not updated in the specified DB2 catalog table.

One possible cause for this message is that someone altered the length of a varying-length column and then tried to run RUNSTATS with the PART option.

Severity:  4 (warning)
System Action:  Processing continues.
User Response:  Run the RUNSTATS utility to collect statistics for:
  • The entire table space, table, column or index, or
  • Every partition.

DSNU624I  csect-name SYSTABSTATS CATALOG STATISTICS FOR table-name PARTITION part-num

# CARD or CARDF = cardinality
NPAGES = npages
PCTPAGES = pctpages
NACTIVE = nactive
PCTROWCOMP = pctrowcomp

Explanation:  The RUNSTATS utility issues this message to report the statistics collected for the specified partition of the table space containing the table.  The statistics follow:

cardinality The number of rows in the table space partition
npages The number of pages on which rows of the table space partition appear
pctpages The percentage of total pages of the table space partition that contain rows from this table
nactive The number of active pages in the table space partition
pctrowcomp The percentage of rows compressed within the total number of active rows in the partition

This message is routed to SYSPRINT.
Severity:  0 (informational)
System Action:  Processing continues.
User Response:  Refer to DB2 Utility Guide and Reference for information about RUNSTATS statistics.

DSNU625I  csect-name SYSCOLDISTSTATS CATALOG STATISTICS FOR column-name, column-name, column-name ... PARTITION part-num

CARDINALITY = cardinality

FREQUENCY COLVALUE
frequency X “hex_string”
frequency X “hex_string”
... ...
frequency X “hex_string”

Explanation:  The RUNSTATS utility issues this message to report the statistics collected for the indexed column ‘column-name’ partition ‘part-num’.  If more than one column is listed, then the statistics collected and the column values reported represent the concatenation of those columns.

The value for CARDINALITY is the number of distinct values for the listed columns.  This statistic appears only if the KEYCARD option was specified.

The values under FREQUENCY are the same as those that are inserted into the DB2 catalog.  Consider each ‘frequency’ as a four-digit number with an implied decimal point two places to the left of the final digit.  The resulting number is the percentage of total rows in the table that contain a particular value for the named index columns.

Frequency is associated with the occurrence of a single value which is listed under COLVALUE.

Frequencies for the most frequent values are collected by default, or if the FREQVAL option is specified and given a COUNT value greater than zero.  If the default is taken, then the ten most frequently occurring values, plus the lowest and highest values in the partition (if not already included in the ten greatest frequencies), are reported in descending order of frequency.

If fewer than ten values appear, then there are fewer than ten distinct values in the index.
If no values appear, then the values are uniformly distributed.

If frequencies appear but column values do not, then the invoker of RUNSTATS is not authorized to read the table. Message DSNU619I is issued to identify the table.

This message is routed to SYSPRINT.

Severity: 0 (informational)

System Action: Processing continues.

User Response: Refer to DB2 Utility Guide and Reference for a description of RUNSTATS statistics.

---

<table>
<thead>
<tr>
<th>DSNU627I</th>
<th>csect-name SYSINDEXSTATS CATALOG STATISTICS FOR index-name PARTITION part-num</th>
</tr>
</thead>
<tbody>
<tr>
<td># CLUSTERRATIO or CLUSTERRATIOF = cluster-ratio</td>
<td></td>
</tr>
<tr>
<td># FIRSTKEYCARD or FIRSTKEYCARDF = first-key</td>
<td></td>
</tr>
<tr>
<td># FULLKEYCARD or FULLKEYCARDF = full-key</td>
<td></td>
</tr>
<tr>
<td># NLEAF = nleaf</td>
<td></td>
</tr>
<tr>
<td># NLEVELS = nlevels</td>
<td></td>
</tr>
<tr>
<td># KEYCOUNT or KEYCOUNTF = keycount</td>
<td></td>
</tr>
</tbody>
</table>

Explanation: The RUNSTATS utility issues this message to report the statistics collected for partition part-num of index index-name.

cluster-ratio The percentage of data rows in the partition that are in clustering order for this index.

first-key The number of distinct values of the first key column in the partition.

full-key The number of distinct values of the key in the partition.

nleaf The number of active leaf pages in the index partition.

nlevels The number of levels in the index tree in the partition.

keycount The number of index keys (entries) in the partition.

This message is routed to SYSPRINT.

Severity: 0 (informational)

System Action: Processing continues.

User Response: Refer to DB2 Utility Guide and Reference for a description of RUNSTATS statistics.

---

<table>
<thead>
<tr>
<th>DSNU628I</th>
<th>csect-name STATISTICS WILL NO LONGER BE COLLECTED ON RESTART</th>
</tr>
</thead>
</table>

Explanation: Since inline statistics is not restartable, Statistics will not be collected on restarting the LOAD/REORG utility. The error message will be issued on restart of a LOAD/REORG utility with STATISTICS keyword specified.

Severity: 4 (warning)

User Response: Run the runstats utility on the object after the utility execution.

---

<table>
<thead>
<tr>
<th>DSNU629I</th>
<th>csect-name INLINE STATISTICS IS NOT SUPPORTED FOR object-name TABLESPACE</th>
</tr>
</thead>
</table>

Explanation: The collection of inline statistics is not supported on the following directory and catalog tablespaces: DSNDB06.SYSDBASE, DSNDB06.SYSDBAUT, DSNDB06.SYSGROUP, DSNDB06.SYSPLAN, DSNDB06.SYSVIEWS, and DSNDB01.DB01

This error message will be issued on execution of a REORG utility with STATISTICS keyword specified.

Severity: 4 (warning)

User Response: Remove the keyword STATISTICS from the REORG utility job statement.

---

<table>
<thead>
<tr>
<th>DSNU630I</th>
<th>csect-name - SYSLOBSTATS CATALOG STATISTICS FOR LOB table space AVGSIZE = avgsize FREESPACE = freespace ORGRATIO = orgratio</th>
</tr>
</thead>
</table>

Explanation: The RUNSTATS utility issues this message to report statistics collected for the LOB table space.

AVGSIZE Average size of a LOB in the LOB table space.

FREESPACE Amount of free space in the LOB table space.

ORGRATIO The ratio of organization in the LOB table space. A value of 1 indicates perfect organization of the LOB table space. The greater the value exceeds 1, the more disorganized the LOB table space.

System Action: RUNSTATS processing continues.

---

<table>
<thead>
<tr>
<th>DSNU631I</th>
<th>csect - UTILITY NOT ALLOWED TO RUN ON TABLESPACE = ttttttt IN ROSHARE READ DATABASE = dddddddd</th>
</tr>
</thead>
</table>

Explanation: An attempt to execute STOSPACE utility on a table space defined in a ROSHARE READ database failed. The STOSPACE utility is only allowed to execute in a ROSHARE OWNER or a nonshared database.

Severity: 4 (warning)

System Action: Processing continues to the next table space or index space in the storage group, if any.

User Response: Resubmit the utility job on the system in which the database was defined with the ROSHARE OWNER attribute.

---

<table>
<thead>
<tr>
<th>DSNU632I</th>
<th>csect - UTILITY NOT ALLOWED TO RUN ON INDEX SPACE = iiiiii IN ROSHARE READ DATABASE = dddddddd</th>
</tr>
</thead>
</table>

Explanation: An attempt to execute STOSPACE utility on an index space defined in a ROSHARE READ database failed. The STOSPACE utility is only allowed to execute in a ROSHARE OWNER or nonshared database.

Severity: 4 (warning)

System Action: Processing continues to the next table space or index space in the storage group, if any.

User Response: Resubmit the utility job on the system in which the database was defined with the ROSHARE OWNER attribute.
### DSNU640I  csect-name DATA SET= nnn OF TABLESPACE= tttttn IN DATABASE= dddddd.dd HAS BEEN MIGRATED BY HSM

**Explanation:** The STOSPACE utility has found that a DB2 data set has been migrated by the Data Facility Hierarchical Storage Manager. The amount of storage space used cannot be determined for DATA SET ‘nnn’ of TABLESPACE ‘ttttttn’ in DATABASE ‘ddddd.dd’. The space allocation information in the catalog will not include the storage used by the migrated data set.

**Severity:** 0 (informational)

**System Action:** Processing continues to the next data set in the storage group, if any.

**System Programmer Response:** If required, the data set may be recalled using HSM, and the STOSPACE utility may be run again.

---

### DSNU641I  csect-name DATA SET= nnn OF INDEXSPACE= iiiiin IN DATABASE= dddddd.dd HAS BEEN MIGRATED BY HSM

**Explanation:** The STOSPACE utility has found that a DB2 data set has been migrated by the Data Facility Hierarchical Storage Manager. The amount of storage space used cannot be determined for DATA SET ‘nnn’ of INDEXSPACE ‘iiiiini’ in DATABASE ‘ddddd.dd’. The space allocation information in the catalog will not include the storage used by the migrated data set.

**Severity:** 0 (informational)

**System Action:** Processing continues to the next data set in the storage group, if any.

**System Programmer Response:** If required, the data set may be recalled using HSM, and the STOSPACE utility may be run again.

---

### DSNU642I  csect-name UNABLE TO ACCESS DBD FOR DATABASE = dddddd.dd, TABLESPACE = ttttttn

**Explanation:** A database descriptor control block could not be accessed by the STOSPACE utility. Information in the DBD is required before space allocation data can be obtained from the appropriate ICF catalog. Storage space used by index space ‘ttttttn’ in database ‘ddddd.dd’ cannot be determined.

**Severity:** 4 (warning)

**System Action:** Processing continues with the next storage group.

**User Response:** Determine the cause for unavailability. The database may be stopped or the DBD may be marked as invalid. The -DISPLAY DATABASE command can be used to determine the status.

**System Programmer Response:** Determine if the reason for the DBD unavailability may require system corrective action.

**Problem Determination:** A DSNT501I message may have been sent to the operator console. If so, see the problem determination section for message DSNT501I in the DSNT... messages on page 315 section.

---

### DSNU643I  csect-name USER user-name NOT AUTHORIZED FOR STOSPACE UTILITY

**Explanation:** Utility processing for the user indicated on the job statement failed, because the user is not authorized to execute the STOSPACE utility.

**Severity:** 8 (error)

**System Action:** Utility processing is terminated without invoking the requested utility or utilities.

**User Response:** Contact the systems programmer for assistance with your security classification.

**System Programmer Response:** If the USER specified on the job statement is incorrect, correct it, and resubmit the job. To run the STOSPACE utility, the user must either have SYSADM authority or have been granted the STOSPACE privilege. Use the SQL GRANT command to give the user the desired authority.

---

### DSNU644I  csect-name NO STORAGE GROUPS NAME FOUND

**Explanation:** You requested the STOSPACE utility to report on all storage groups, but no storage group was found.

**Severity:** 4 (warning)

This condition does not prevent subsequent processing.

**System Action:** This message indicates completion of the STOSPACE utility. Processing continues to the next utility statement in the utility job step, if any. If not, the utility job step is normally terminated. Resources are released to their prior availability state. The UTILID of the utility job step becomes available for reuse.

**User Response:** This message indicates that there are no storage groups defined. Consult the system programmer to determine the reason for this condition.

**System Programmer Response:** This message indicates either that no storage groups were defined by the installation process (or by subsequent SQL procedures) or they have all been dropped. If this is an error, the required storage groups...
must be re-created with the CREATE STOGROUP SQL statement.

**DSNU646I**

```plaintext
   sect-name STORAGE GROUP NAME
   nnnnnnn NOT FOUND
```

**Explanation:** This message is issued by STOSPACE when one of the requested storage groups is not found.

The following circumstances may exist:

1. A storage group name is misspelled.
   - **Severity:** 4 (warning)
   - **System Action:** Processing proceeds normally to the next storage group if any.
   - **User Response:** Verify the existence or spelling of the storage group names by referring to SYSIBM.SYSSTOGROUP. Submit another request with the correct storage group designated.

2. The indicated offset cannot be replaced by this method.
   - **Severity:** 4 (warning)
   - **System Action:** Processing continues to the next index in the storage group, if any.
   - **User Response:** Use the 'reason-code' and 'type-code' to determine why the resource was unavailable. When the problem has been resolved, resubmit the STOSPACE request.

**Problem Determination:** See the Problem Determination section for message DSNT500I on page 355

**DSNU647I**

```plaintext
   sect-name UNAVAILABLE REASON X reason-code
   UNAVAILABLE TYPE X type-code,
   TABLESPACE NAME= table-space-name NOT FOUND
```

**Explanation:** The indicated table space was not available for processing by the STOSPACE utility. The reason for its unavailability is given in 'reason-code'. The type of unavailability is given in 'type-code'.

This message may be issued when an inconsistency occurs between SYSIBM.SYSTABLESPACE and SYSIBM.SYSTABLEPART at the beginning of STOSPACE execution, and SYSIBM.SYSTABLESPACE during or at the end of processing. The inconsistency may be due to a storage group being dropped during the processing of STOSPACE utility.

**Severity:** 4 (warning)

**System Action:** Processing continues to the next table space in the storage group, if any.

**User Response:** Use the 'reason-code' and 'type-code' to determine why the resource was unavailable. When the problem has been resolved, resubmit the STOSPACE request.

**System Programmer Response:** Determine if the 'reason-code' and 'type-code' require system corrective action.

**Problem Determination:** See the Problem Determination section for message DSNT500I on page 355

**DSNU650I**

```plaintext
   sect-name control-statement-text
```

**Explanation:** Each control statement is returned to the invoker as a part of the normal output. If an error occurred while processing the statement, a separate error message follows this message.

**Severity:** 0 (informational)

**System Action:** The processing of the utility request continues normally.

**DSNU651I**

```plaintext
   sect-name SET NOCOPYPEND OPERATION SUCCESSFUL
```

**Explanation:** This message reports the successful completion of the REPAIR SET TABLESPACE NOCOPYPEND utility operation. The COPY PENDING restriction has been removed from the specified table space.

**Severity:** 0 (informational)

**System Action:** The REPAIR SET statement has completed normally.

**DSNU652I**

```plaintext
   sect-name VERIFY OPERATION SUCCESSFUL
```

**Explanation:** This message is issued during REPAIR utility processing in response to a VERIFY control statement. It indicates the verification requested was successful, permitting a subsequent REPLACE request to take effect.

**Severity:** 0 (informational)

**System Action:** The requested verification was successful. If this is the only verification required for the subsequent REPLACE control statement, the REPLACE control statement takes effect. If there are other verification control statements, they must also complete successfully before the subsequent REPLACE control statement takes effect.

**DSNU653I**

```plaintext
   sect-name REPLACE OPERATION AT OFFSET hex-data WITH DATA hex-data FAILED. ATTEMPTED TO REPLACE CRITICAL NON-DATA INFORMATION ON THE PAGE page-num WITH INCORRECT INFORMATION.
```

**Explanation:** The REPAIR utility job with the LOG YES option was unable to replace certain critical, non-data information in the page for one of these reasons:

- Some critical information on any page at the indicated offset cannot be replaced by this method.
- The page is a header page and some of the information at the indicated offset cannot be replaced by this method.
• The information can be replaced only by using the LOG NO option.

Severity: 8 (error)
System Action: REPAIR resumes executing at the next LOCATE statement. Later control statements in the same LOCATE block are not executed.
User Response: Correct the REPAIR control statements and resubmit the request in a new utility job step.

User Response: Check the OFFSET option on the REPLACE statement to be sure it does not cause critical information to be replaced. If the replacement is intentional, use the LOG NO option.

**DSNU654I** csect-name VERIFY OPERATION FAILED, DATA IS hex-data

Explanation: The verify operation requested on the control statement failed. The actual data is given as ‘hex-data’.
Severity: 4 (warning)
System Action: All REPAIR REPLACE actions subject to the current LOCATE scope are ignored. Processing continues at the next LOCATE request, if any.
User Response: Determine why the data (as reported in the message) does not match the expectations of VERIFY option. Make the appropriate correction, and resubmit the REPAIR request in a new utility job step.

Problem Determination: The REPAIR DUMP option can help you determine the correct verification data. Refer to DB2 Utility Guide and Reference for REPAIR processing constraints.

**DSNU655I** csect-name DELETE OPERATION SUCCESSFUL

Explanation: This message is issued during the REPAIR utility in response to a DELETE control statement.
Severity: 0 (informational)
System Action: The data record specified on the previous LOCATE statement and all of its related INDEX entries have been deleted from the system. Processing continues.

**DSNU656I** csect-name REPLACE OPERATION SUCCESSFUL, DATA WAS hex-data

Explanation: This message is issued by the REPAIR utility in response to a REPLACE control statement request. The message indicates that replacement of the data occurred and that the replaced data had the indicated hexadecimal value (‘hex-data’).
Severity: 0 (informational)
System Action: The REPAIR utility located the indicated record, performed all requested verifications, and replaced the data in the record at the indicated offset with the new data as defined by the REPLACE control statement.
System Programmer Response: If a changed record is recovered before an image copy is made, and the REPAIR utility was run with LOG NO, the repair must be reapplied. If the REPAIR utility was run with LOG YES, no image copy is required before recovering the data after the repair.

**DSNU657I** csect-name REPLACE RESET OPERATION SUCCESSFUL

Explanation: This message is issued by the REPAIR utility in response to a REPLACE RESET control statement request. The message indicates that the broken page indicator has been reset.
Severity: 0 (informational)
System Action: The REPAIR utility has reset the broken page indicator for the specified page. Although the reset indicator has been committed, it has not been logged. If the page is recovered before an image copy is made, the REPAIR RESET must be reapplied.

However, to make the repair persist across subsequent RECOVER operations, an image copy should be taken subsequent to the completion of the REPAIR utility.

**DSNU658I** csect-name MULTIPLE RECORDS FOUND WITH SPECIFIED KEY

Explanation: The specified key is not unique. Several DSNU660I messages, giving possible RID values for this KEY, follow this message.
Severity: 8 (error)
System Action: Processing continues normally.
User Response: Change the LOCATE statement to locate the desired RID, and resubmit the request in a new utility job step.

**DSNU659I** csect-name REPAIR LEVELID OPERATION DISALLOWED.

Explanation: The REPAIR utility with the LEVELID clause is not allowed. Possible reasons are:
• The data set was in use at the time the REPAIR utility was run.
• The page set has outstanding log apply activity (an indoubt UR has interest in the page set or the page set has pages in the logical page list (LPL)).
Severity: 8 (error)
System Action: Processing ends with this operation.
User Response: The REPAIR LEVELID operation for the given index space or table space cannot continue at this stage. If the page set is in use, you should not attempt to run REPAIR LEVELID. If the page set has log apply activity outstanding (in-doubt UR or pages in LPL), the log apply activity must complete before using REPAIR LEVELID. Submit other REPAIR control statements in a different job step.

**DSNU660I** csect-name POSSIBLE RID rid

Explanation: ‘rid’ is one of several records that map to the specified KEY.
Severity: 8 (error)
System Action: Other records also mapping to the specified KEY are identified by other DSNU660I messages. This message is preceded by message DSNU658I. Processing continues normally.
User Response: Change the LOCATE statement to locate the desired RID, and resubmit the request in a new utility job step. If you suspect an error in DB2, refer to Section 3 of DB2 Utility Guide and Reference.

---

Wbulletmed hex-data

Wbulletmed

Wbulletmed
Diagnosis Guide and Reference for information on identifying and reporting the problem.

**DSNU661I** csect-name RECORD NOT FOUND IN PAGE, MAXID= hex-data

**Explanation:** A RID was either specified or obtained from the clustering index via the specified KEY. The PAGE indicated in the RID did not contain the RECORD indicated in the RID.

**Severity:** 8 (error)

**System Action:** Processing proceeds to the next LOCATE statement, if there is one.

**User Response:** Either change the LOCATE statement to locate a valid RID or KEY, or use LOCATE PAGE and resubmit the REPAIR statements in a new utility job step. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**DSNU662I** csect-name NO RECORD FOUND WITH SPECIFIED KEY

**Explanation:** A KEY was specified on the LOCATE statement, but no entry exists in the clustering index for that KEY.

**Severity:** 8 (error)

**System Action:** Processing begins at the next LOCATE statement, if there is one.

**User Response:** Correct the LOCATE statement, and resubmit the REPAIR statements in a new utility job step.

**DSNU663I** csect-name PAGE hex-page-number NOT FOUND

**Explanation:** The page identified a record identifier (RID) or KEY does not exist in the specified table space.

**Severity:** 0 (informational) when issued by DUMP PAGES(n).

**System Action:** Processing begins at the next LOCATE statement, if there is one.

**User Response:** Correct the LOCATE statement, and resubmit the REPAIR statements in a new utility job step.

**DSNU664I** csect-name INVALID OFFSET OR LENGTH FOR xxxx

**Explanation:** ‘xxxxx’ is ‘RECORD’ or ‘PAGE’. The specified or default values for OFFSET and LENGTH combine to extend beyond the specified record or page.

**Severity:** 4 (warning)

**System Action:** Processing continues at the next LOCATE statement, if there is one.

**User Response:** Correct the OFFSET and/or LENGTH specification, and resubmit the REPAIR statements in a new utility job step. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**DSNU665I** csect-name NO RECORD ASSOCIATED WITH SPECIFIED RID

**Explanation:** A record identifier (RID) was specified on the LOCATE statement, but that RID is not associated with any record in the specified table space. If DELETE processing returns this message, the RID may exist but be invalid for DELETE.

**Severity:** 8 (error)

**System Action:** Processing begins at the next LOCATE statement, if there is one. Subsequent utilities in the same job step will not be executed.

**User Response:** Correct the LOCATE statement, and resubmit the REPAIR statements in a new utility job step.

**Problem Determination:** REPAIR DELETE will issue this message for RIDs which are internal and do not directly represent user data. The DUMP keyword may be used to view the RID, if it exists. These internal records may only be repaired using the REPLACE keyword.

**DSNU666I** csect-name NO INDEX EXISTS

**Explanation:** The KEY for this table space is not a full clustering key. The statement is invalid.

**Severity:** 8 (error)

**System Action:** Processing continues at the next LOCATE statement, if there is one.

**User Response:** Correct the LOCATE statement to use the clustering index, or change LOCATE by PAGE or RID. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**DSNU668I** csect-name UNABLE TO CONVERT KEY TO format

**Explanation:** ‘format’ specifies the data type to which the KEY specification must be converted. The conversion has failed.

**Severity:** 8 (error)

**System Action:** Processing begins at the next LOCATE statement, if there is one.

**User Response:** Correct the LOCATE statement to specify a KEY either of the indicated data type or of a compatible data type. Then resubmit the REPAIR statements in a new utility job step. Refer to DB2 Utility Guide and Reference for a discussion of conversion constraints.

**DSNU669I** csect-name INDEX NOT FOUND FOR SPECIFIED TABLESPACE

**Explanation:** An index was specified on the LOCATE KEY statement via the INDEX keyword, but no index by that name was found related to the specified TABLESPACE.

**Severity:** 8 (error)

**System Action:** Processing begins at the next LOCATE statement, if there is one.

**User Response:** Correct the LOCATE statement and resubmit the REPAIR statements in a new utility job step.

**Problem Determination:** Valid index names can be found in the SYSIBM.SYINDEXES catalog table.
**DSNU670I**  
csect-name PAGE x page-id IS A BROKEN PAGE

**Explanation:** The indicated page located by the REPAIR utility has been marked broken by the data manager. The 'page id' is given in hexadecimal. This page is not accessible until the broken page indicator is reset by the REPAIR REPLACE RESET option.

**Severity:** 4 (warning)

**System Action:** The message reports that the page in which the REPAIR utility is requested to REPLACE some data is broken.

**User Response:** Determine the cause of the broken page with the assistance of the system programmer. When it is repaired, use the REPAIR RESET option.

**System Programmer Response:** Determine the cause of the broken page. It could be an internal error and require support center assistance. The REPAIR DUMP option can be used to determine the contents of the page for failure analysis. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**DSNU672I**  
csect-name INDEX USED HAS MULTIPLE-FIELD KEY

**Explanation:** A REPAIR LOCATE KEY operation was attempted against a table space using an index that has a multiple-field key. LOCATE KEY does not support multiple-field keys.

**Severity:** 8 (error)

**System Action:** Processing begins at the next LOCATE scope, if any.

**User Response:** Change the LOCATE statement to specify PAGE and RID, and resubmit the REPAIR statements in a new utility job step.

**DSNU673I**  
csect-name REPAIR LOCATE RID LOCATED A NON-DATA PAGE

**Explanation:** The LOCATE RID option of the REPAIR utility was used to process a nondata page.

**Severity:** 8 (error)

**System Action:** Processing continues at the next LOCATE statement. Otherwise, processing stops.

**User Response:** To process nondata pages, use the LOCATE PAGE option in the REPAIR control statements and resubmit the new utility job step. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**DSNU674I**  
csect-name ROWID VERSION IS NOT FOUND IN AUXILIARY INDEX

**Explanation:** The REPAIR utility was unable to locate the ROWID rowid and VERSION version in the index on the auxiliary table.

**System Action:** Utility returns completion code=8.

**Programmer Response:** Correct the ROWID or VERSION.

Only ROWID and VERSION values previously generated by DB2 can be used. The most likely source values of a ROWID and VERSION are messages DSNU743I, DSNU805I, and DSNU806I from the CHECK DATA or CHECK LOB utilities.

**DSNU678I**  
csect-name VERIFY, REPLACE, DUMP, OR DELETE BEFORE LOCATE

**Explanation:** The REPAIR utility was requested to VERIFY, REPLACE, or DUMP or DELETE a page or record and that page of record could not be located.

**Severity:** 8 (error)

**System Action:** Processing begins at the next LOCATE statement, if there is one. Subsequent utilities in the same job step will not be executed.

**User Response:** Correct the REPAIR control statements, and resubmit the request in a new utility job step. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**DSNU679I**  
csect-name MULTIPLE 'DELETE'S PER 'LOCATE' NOT ALLOWED

**Explanation:** The REPAIR utility was requested to DELETE the same record more than once. Only one DELETE is allowed per LOCATE RID or LOCATE KEY.

**Severity:** 8 (error)

**System Action:** Processing begins at the next LOCATE scope, if any. Subsequent utilities in the same job step are not executed.

**User Response:** Remove all but one DELETE control statement from each LOCATE scope which is intended to delete a record. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**DSNU680I**  
csect-name PAGE hex-page-number

**Explanation:** This message is issued as an identifier at the top of each page dumped by the REPAIR DUMP PAGES facility. 'hex-page-number' identifies the page which is about to be dumped.

**Severity:** 0 (informational)

**System Action:** Processing continues.

**DSNU681I**  
csect-name SET NOCHECKPEND OPERATION SUCCESSFUL

**Explanation:** This message reports the successful completion of the REPAIR SET TABLESPACE NOCHECKPEND utility operation. The check pending restriction has been removed from the specified table space.

**Severity:** 0 (informational)

**System Action:** The REPAIR SET statement has completed normally.
DSNU682I  csect-name SET NORCVRPEND OPERATION SUCCESSFUL
Explanation: This message reports the successful completion of the REPAIR SET NORCVRPEND utility operation. The RECOVERY PENDING restriction has been removed from the specified table space, from the specified index, or from all indexes of the specified table space.
Severity: 0 (informational)
System Action: The REPAIR SET statement has completed normally.

DSNU683I  csect-name REPAIR LEVELID OPERATION SUCCESSFUL.
Explanation: The REPAIR utility with the LEVELID clause completed successfully.
Severity: 0 (informational)
System Action: Processing completed successfully.
User Response: Submit any other REPAIR control statements in a different job step.

DSNU684I  csect-name - SET NOAUXCHKP OPERATION SUCCESSFUL
Explanation: This message reports the successful completion of the REPAIR SET NOAUXCHKP utility operation. The auxiliary check pending (ACHKP) state has been removed for the specified base table space.
System Action: Utility returns completion code=0.

DSNU685I  csect-name - SET NORBDPEND OPERATION SUCCESSFUL
Explanation: This message reports the successful completion of the REPAIR SET NORBDPEND utility operation. The three restrictions REBUILD PENDING, REBUILD PENDING STAR and PAGESET REBUILD PENDING have been removed from the specified index or from all indexes of the specified table space.
Severity: 0 (informational)
System Action: The REPAIR SET statement has completed normally.

DSNU686I  csect-name - SET NOAUXWARN OPERATION SUCCESSFUL
Explanation: This message reports the successful completion of the REPAIR SET NOAUXWARN utility operation. The AUX WARNING state has been removed for the specified table space.
Severity: 0 (informational)
System Action: Utility returns completion code=0.
Programmer Response: None.

DSNU687I  csect-name - ROWID= rowid VERSION=version LOB DELETED
Explanation: The LOB with the ROWID rowid and VERSION version was successfully deleted from the specified LOB table space.
System Action: Utility returns completion code=0.
Programmer Response: None.

DSNU691I  csect-name - LOB WITH ROWID= rowid VERSION=version NOT FOUND
Explanation: The REPAIR utility was unable to find a LOB with the ROWID of rowid and VERSION version.
Programmer Response: Either the ROWID is incorrect, or the index on the auxiliary table is broken. In the first case correct the ROWID as specified on the LOCATE ROWID statement. If the index on the auxiliary table is broken, execute the REBUILD INDEX utility to rebuild the index.

DSNU700I  csect-name nnnn INDEX ENTRIES UNLOADED FROM INDEX=iiii PARTITION=pppp
Explanation: The CHECK utility UNLOAD phase unloaded nnnn records from the index named iii and partition pppp.
Severity: 0 (informational)
System Action: Processing continues.

DSNU701I  csect-name nnnn INDEX ENTRIES UNLOADED FROM iii
Explanation: The CHECK Utility UNLOAD phase unloaded nnnn records from the index named iii.
Severity: 0 (informational)
System Action: Processing continues.

DSNU702I  csect-name INVALID INDEX SPECIFICATION. INDEX=iiii
Explanation: All tables referenced by the INDEXES in the CHECK or REBUILD utility must be in the same table space. Index ‘iiii’ is not over a table in the table space specified with the TABLESPACE keyword.
Severity: 8 (error)
System Action: Utility processing is discontinued.
User Response: Correct the index name and/or the TABLESPACE parameters such that a single table space is involved, and rerun the utility job.
Problem Determination: To CHECK or REBUILD ALL INDEXES in a table space, use the TABLESPACE keyword, but do not use the list option. This is one way to correct this error. If you want to correct the list of indexes specified in the index name list, the following procedure will locate the table space name related to the index ‘iiii’.

The index name ‘iiii’ reported in the message is of the form ‘creator.name’. Obtain the TBCREATOR and TBNAME columns from the DB2 catalog table SYSIBM.SYSTABLES where columns CREATOR and NAME have the values reported in the message. Obtain the DBNAME and TSNAME columns from the DB2 catalog table SYSIBM.SYSTABLES, where columns CREATOR and NAME have the values
obtained from TBCREATOR and TBNAMES of SYSIBM.SYSINDEXES.

The values for DBNAME and TSNAME must be the same for all indexes specified in the index name list and must be the same as the table space name specified on the TABLESPACE keyword (if provided).

**DSNU703I** csect-name INVALID INDEX SPECIFICATION.
INDEX=iiii

**Explanation:** All tables referenced by the indexes in the CHECK or REBUILD utility must be in the same table space. Index 'iiii' is not over a table in the same table space as the prior indexes listed in the index name list.

**Severity:** 8 (error)

**System Action:** Utility processing is discontinued.

**User Response:** Correct the index name and/or the TABLESPACE parameters such that a single table space is involved, and rerun the utility job.

**Problem Determination:** To CHECK or REBUILD ALL INDEXES in a table space, use the TABLESPACE keyword, but do not use the list option. This is one way to correct the missing the index spec.

The index name 'iiii' reported in the message is of the form 'creator.name'. Obtain the TBCREATOR and TBNAMES columns from the DB2 catalog table SYSIBM.SYSINDEXES, where columns CREATOR and NAME have the values reported in the message. Obtain the DBNAME and TSNAME columns from the DB2 catalog table SYSIBM.SYSTABLES, where columns CREATOR and NAME have the values obtained from TBCREATOR and TBNAMES of SYSIBM.SYSINDEXES.

The values for DBNAME and TSNAME must be the same for all indexes specified in the index name list and must be the same as the table space name specified on the TABLESPACE keyword if provided.

**DSNU705I** csect-name UNLOAD PHASE COMPLETE, ELAPSED TIME=tttt

**Explanation:** The unload phase of the CHECK or REBUILD INDEX utility is complete.

**Severity:** 0 (informational)

**System Action:** Processing continues.

**DSNU706I** csect-name ROW IS IN WRONG PARTITION
RID=rrrr, INDEX=iiii, KEY=kkkk, CORRECT PART=pppp, WRONG PART=wwww

**Explanation:** The row at RID 'rrrr' resides in the wrong partition. The partitioning KEY 'kkkk' for partitioning INDEX 'iiii' indicates that the row at RID 'rrrr' should reside in partition 'pppp', however the rid indicates that the row contains partition 'wwww'.

**Severity:** 4 (warning)

**System Action:** Utility processing continues.

**User Response:** Run RECOVER TABLESPACE utility to recover the data or run REPAIR DELETE utility to delete the row 'rrrr' followed by CHECK INDEX and CHECK DATA utility if referential constraints are involved.

**Problem Determination:** The inconsistency between the table space partition number of a row and the index space partition number of the row's clustering key may be due to a DB2 internal error, but is most likely due to a user using the DSN1COPY service aid to populate a target table space with data from a source table space when the clustering key values on the source and target table spaces are not identical.

**DSNU707I** csect-name INDEX ENTRY POINTS TO WRONG TABLE. OBID=ooooo, RID=rrrr, INDEX=

**Explanation:** The CHECK utility CHECKIDX phase found that index 'iiii' contains an entry for key 'kkkk' that points to record at RID 'rrrr', but the record belongs to the table with OBID 'oooo'.

**Severity:** 4 (warning)

**System Action:** CHECK utility processing continues.

**User Response:** Run the REBUILD INDEX utility for index 'iiii'.

**DSNU708I** csect-name INDEX IS NOT UNIQUE. INDEX=iiii, KEY=kkkk

**Explanation:** The CHECK utility CHECKIDX phase found that unique index 'iiii' contains a nonunique key, 'kkkk'.

**Severity:** 4 (warning)

**System Action:** CHECK utility processing continues.

**User Response:** Drop the unique index, and delete the duplicate rows. Re-create the index.

**DSNU709I** csect-name NO INDEX ENTRY FOR ROW.
RID=rrrr, INDEX=iiii, KEY=kkkk

**Explanation:** The CHECK utility CHECKIDX phase found that index 'iiii' is missing an entry for the row at RID 'rrrr' with key 'kkkk'.

**Severity:** 4 (warning)

**System Action:** CHECK utility processing continues.

**User Response:** Run the REBUILD INDEX utility for index 'iiii'.

**DSNU710I** csect-name INDEX ENTRY CONTAINS INVALID ZERO REPRESENTATION. RID=rrrr, INDEX=iiii, KEY=kkkk

**Explanation:** The CHECK utility CHECKIDX phase found that index 'iiii' has an entry that contains a negative zero. The index entry is for the row at RID 'rrrr' with key 'kkkk'.

**Severity:** 4 (warning)

**System Action:** CHECK utility processing continues.

**User Response:** Run the REBUILD INDEX utility for index 'iiii'.

**DSNU711I** csect-name NO ROW FOR INDEX ENTRY.
RID=rrrr, INDEX=iiii, KEY=kkkk

**Explanation:** The CHECK utility CHECKIDX phase found that the index 'iiii' contains an entry that has no row. The index entry contained RID 'rrrr' and key 'kkkk', but RID 'rrrr' is not a valid record.

**Severity:** 4 (warning)

**System Action:** CHECK utility processing continues.
User Response: Run the REBUILD INDEX utility for index 'iii'.

DSNU712I csect-name INDEX OUT OF SEQUENCE.
INDEX=iii, KEY=kkkk
Explanation: The CHECK utility CHECKIDX phase found that index 'iii' is not in correct sequence.
Severity: 4 (warning)
System Action: CHECK utility processing continues.

User Response: Run the REBUILD INDEX utility for index 'iii'.

DSNU713I csect-name KEYS MISMATCH. RID=rrrr, INDEX=iii, KEY=kkkk, DATA KEY=jjjj
Explanation: The CHECK utility CHECKIDX phase found that index iii contains an entry for the row at rid rrrr that is inconsistent. KEY kkkk does not match DATA KEY jjjj.
Severity: 4 (warning)
System Action: CHECK utility processing continues.

User Response: Run the REBUILD INDEX utility for index 'iii'.

DSNU715I csect-name MULTIPLE INDEX ENTRIES FOR ROW. RID=rrrr, INDEX=iii, KEY=kkkk
Explanation: The CHECK utility CHECKIDX phase found that index 'iii' has multiple index entries for the row at RID 'rrrr' with key 'kkkk'.
Severity: 4 (warning)
System Action: CHECK utility processing continues.

User Response: Run the REBUILD INDEX utility for index 'iii'.

DSNU717I csect-name nnnn ENTRIES CHECKED FOR INDEX=iii PARTITION=pppp
Explanation: The CHECK utility completed checking index iii partition pppp and processed nnnn index entries. This message is issued once for each index partition checked.
Severity: 0 (informational)
System Action: Processing continues.

DSNU718I csect-name NO INDEXES FOUND FOR TABLESPACE tttt
Explanation: A utility has been invoked with the TABLESPACE keyword specifying a table space containing tables that have no indexes.
Severity: 4 (warning)
System Action: This message indicates completion of the utility. Processing continues to the next utility statement in the job step, if any. If there are no utility statements following, the job step becomes terminated normally and the UTILID of the job step becomes available for reuse.
User Response: If the table space specification is in error, correct it and resubmit the utility. If the table space specification is correct, and the table space contains no indexed tables, this is a normal indication and no response is necessary.

DSNU719I csect-name nnnn ENTRIES CHECKED FOR INDEX iii
Explanation: The CHECK utility has completed checking index 'iii' and has processed 'nnnn' index entries. This message will be issued once for each index checked.
Severity: 0 (informational)
System Action: Processing continues.

DSNU720I csect-name CHECKIDX PHASE COMPLETE, ELAPSED TIME = tttt
Explanation: The CHECK utility CHECKIDX phase is complete.
Severity: 0 (informational)
System Action: Processing continues.

DSNU721I csect-name - USER auth-id DOES NOT HAVE DELETE AUTHORITY ON TABLE
Explanation: The CHECK DATA utility was run with DELETE YES, but user auth-id does not have authority to delete from a table specified in the utility statement or from one of its descendents.
Severity: 8 (error)
System Action: Further utility processing is terminated.
User Response: Obtain authorization to delete from the tables specified in the utility statement and any of its descendents that are affected.

DSNU722I csect-name - USER userid DOES NOT HAVE INSERT AUTHORITY ON EXCEPTION TABLE
Explanation: The CHECK DATA utility was run with FOR EXCEPTION specified but user 'userid' does not have authority to insert into an exception table specified in the utility statement.
Severity: 8 (error)
System Action: Further utility processing is terminated.
User Response: Obtain authorization to insert into all of the exception tables specified in the utility statement.

DSNU725I csect-name DUPLICATE TABLESPACE tsp NAMES EXIST IN THE TABLESPACE LIST
Explanation: This message is issued by the CHECK DATA utility when a duplicate table space 'tsp' is found in the table space list. An entry in the list for the same table space with a partition specified is also considered a duplicate. This is because all partitions are the default when no partition is specified for a partitioned table space. The CHECK DATA utility proceeds and the duplicate entry is skipped.
Severity: 4 (warning)
System Action: Processing continues.
DSNU726I  csect-name SCOPE PENDING IS ACTIVE, BUT THE ENTIRE TABLE SPACE tsp MUST BE CHECKED

Explanation: This message is issued by the CHECK DATA utility when checking with the option SCOPE PENDING. Table space tsp is in check pending status, but the utility is checking all rows in dependent tables or tables defined with check constraints in that table space.

Severity: 8 (error)
System Action: The utility continues processing.

DSNU727I  csect-name TABLESPACE tsp IS NOT CHECK PENDING

Explanation: This message is issued when 'CHECK TABLESPACE tsp SCOPE PENDING' is specified and the CHECK DATA utility finds that the table space is not in a check pending state. The CHECK DATA utility skips table space 'tsp' and will continue with any other table space specified. The catalog fields that reflect the extent of a check pending state are updated to ensure that they indicate that no check is required.

Severity: 4 (warning)
System Action: The utility continues processing.

DSNU728I  csect-name INVALID EXCEPTION TABLE table2 FOR table1

Explanation: This message is issued when the CHECK DATA utility finds an exception table is invalid. The exception table named 'table2' which was specified for rows from table, 'table1', is invalid. Either 'table2' was missing columns of 'table1' or 'table2' contained incompatible column attributes. The CHECK DATA utility will terminate processing after all exception tables have been examined.

Severity: 8 (error)
System Action: The CHECK DATA utility will terminate processing after all the exception tables have been examined.

User Response: Refer to Section 2 (Volume 1) of DB2 Administration Guide for a definition of the CREATE TABLE command with the LIKE operand to correct the invalid exception table.

DSNU729I  csect-name TABLE table-name NOT SPECIFIED IN THE 'FOR EXCEPTION' CLAUSE

Explanation: The CHECK DATA utility did not find a required table listed in the FOR EXCEPTION clause. All tables with constraints in the table spaces being checked and their descendents must be listed in the FOR EXCEPTION clause of CHECK DATA utility.

Severity: 8 (error)
System Action: The CHECK DATA utility terminates processing after all the required tables are examined.

User Response: Examine the utility input statement to determine the reason for the missing table named in the message. Correct the input statement to include the missing table and resubmit the job. Refer to DB2 Utility Guide and Reference for information about the FOR EXCEPTION clause of the CHECK DATA utility and use of exception tables.

DSNU730I  csect-name CHECKING TABLE tab

Explanation: This message is issued when the CHECK DATA utility begins to process a table. The name of table being checked is 'tab'.

Severity: 0 (informational)
System Action: Processing continues.

DSNU731I  csect-name EXCEPTION LIMIT REACHED

Explanation: The EXCEPTION limit specified on the CHECK utility statement has been reached.

Severity: 8 (error)
System Action: The CHECK utility terminates processing.

User Response: If required, increase the exception limit and resubmit the job.

DSNU732I  NO TABLE TO BE CHECKED FOR TABLESPACE tsp

Explanation: The CHECK DATA utility determined that none of the tables in table space tsp has a constraint defined. Therefore, no table in that table space is checked.

This message is issued by the following CSECT: DSNUKINP

Severity: 4 (warning)
System Action: Utility processing continues.

DSNU733I  csect-name ROW (RID=rrrrrr) HAS NO PARENT FOR rel

Explanation: This message is issued when the CHECK DATA utility finds a row in a dependent table without a parent. The row with RID, 'rrrrrr', has no parent for the relationship named 'rel'. This message is always proceeded by a DSNU730I message that identifies the table in error.

Severity: 4 (warning)
System Action: Processing continues.

User Response: Refer to Section 2 (Volume 1) of DB2 Administration Guide for a discussion of the check pending operation.

DSNU735I  csect-name DUPLICATE TABLESPACE tsp PARTITION part NAMES EXIST IN THE TABLESPACE LIST

Explanation: This message is issued by the CHECK DATA utility when a duplicate table space 'tsp' and partition 'part' is found in the table space list. An entry in the table space list with a partition specified is considered to be a duplicate when another entry for the same table space with no partition specified (defaults to all partitions for a partitioned table space) is found. In this case, the table space list entry with no partition specified has priority and the entry with a partition specified is skipped. The CHECK DATA utility proceeds and the duplicate entry is skipped.

Severity: 4 (warning)
System Action: Processing continues.
**DSNU736I**  \( \text{csect-name} \) **SCOPE PENDING IS ACTIVE, BUT THE ENTIRE TABLE SPACE tsp PARTITION part MUST BE CHECKED**

**Explanation:** This message is issued by the CHECK DATA utility when checking with the option SCOPE PENDING. Table space tsp partition part is in check pending status, but the utility is checking all rows in that table space partition.

**Severity:** 4 (warning)

**System Action:** The utility continues processing.

**DSNU737I**  \( \text{csect-name} \) **TABLESPACE tsp PARTITION part IS NOT CHECK PENDING**

**Explanation:** This message is issued when ‘CHECK DATA TABLESPACE tsp PART partition SCOPE PENDING’ is specified and the CHECK DATA utility finds that the table space partition is not in a check pending state. The CHECK DATA utility skips table space ‘tsp’ partition ‘part’ and continues with any other table space specified. The catalog fields that reflect the extent of a check pending state are updated to ensure that they indicate that no check is required.

**Severity:** 4 (warning)

**System Action:** Processing continues.

**DSNU739I**  \( \text{csect-name} \) **CHECK TABLE tab COMPLETE, elapsed time=t1**

**Explanation:** This message is issued when the CHECK DATA utility finishes processing a table. The elapsed clock time that the check of table ‘tab’ consumed is ‘t1’.

**Severity:** 0 (informational)

**DSNU740I**  \( \text{csect-name} \) **CHECKING TABLE tab PARTITION part**

**Explanation:** This message is issued when the CHECK DATA utility begins to process a table of a partitioned table space in which a single partition was specified. The name of the table and the number of the partition being checked are identified in the message.

**Severity:** 0 (informational)

**System Action:** Processing continues.

**DSNU741I**  \( \text{csect-name} \) **nn ROWS DELETED FROM TABLE tab**

**Explanation:** This message is issued by the CHECK DATA utility when the DELETE YES option is specified. The number of rows deleted from TABLE tab is the number of rows that contain referential integrity violations or check constraint violations, plus their descendant rows. The number of rows deleted from TABLE tab is equal to the number of rows inserted into the corresponding exception table.

**Severity:** 4 (warning)

**System Action:** Processing continues.

**DSNU742I**  \( \text{csect-name} \) **ROW (RID=rrrr) VIOLATES CHECK CONSTRAINT constraint-name ON TABLE table-name**

**Explanation:** The CHECK DATA utility found that the row with RID=rrrr in table table-name violated check constraint constraint-name.

**Severity:** 4 (warning)

**System Action:** Processing continues

**User Response:** Refer to Section 2 (Volume 1) of DB2 Administration Guide for a discussion of the check pending operation and recovery procedures.

**DSNU743I**  \( \text{csect-name} \) **- LOB WITH ROWID=rowid VERSION=version IS INVALID**

**Explanation:** The CHECK LOB utility found that the LOB column with ROWID rowid and VERSION version was marked as invalid.

**System Action:** LOB table space is set Aux Warning. Utility returns completion code=4.

**Programmer Response:** The LOB column must be updated or the row containing the LOB column deleted using SQL to remove the invalid indication.

**DSNU745I**  \( \text{csect-name} \) **- ROWID=rowid VERSION=version RID=RID MISSING IN LOB TABLE SPACE=lob-table-space-name**

**Explanation:** The CHECK INDEX utility found an index entry key with ROWID rowid and VERSION version in the index, but not in the LOB table space named lob-table-space-name.

**System Action:** The utility returns completion code=4. The index is set Recover Pending.

**Programmer Response:** Use REBUILD INDEX or RECOVER to correct the index on the auxiliary table.

**DSNU747I**  \( \text{csect-name} \) **- ROWID=rowid VERSION=version MISSING IN INDEX=index-name**

**Explanation:** The CHECK INDEX utility found a LOB with ROWID rowid and VERSION version in the LOB table space but not in the index on the auxiliary table, index-name.

**System Action:** Utility returns completion code=4. The index is set Recover Pending.

**Programmer Response:** Use REBUILD INDEX to correct the index on the auxiliary table.

**DSNU749I**  \( \text{csect-name} \) **CHECK DATA COMPLETE, ELAPSED TIME=t1**

**Explanation:** This message is issued when the CHECK DATA utility is complete. The elapsed clock time that the CHECK DATA utility consumed is ‘t1’.

**Severity:** 0 (informational)

**System Action:** Processing ends.
DSNU750I  csect-name CATMAINT operation STARTED
Explanation: The CATMAINT utility started for the indicated operation.
Severity: 0 (informational)
System Action: Utility processing continues normally.

Severity: 8 (error)
System Action: Utility abends.
User Response: User data should not be in the target catalog before running the CATMAINT utility. Free or drop the object from the target catalog and rerun the CATMAINT utility.

Severity: 8 (error)
System Action: Utility processing terminates.
User Response: Review the JCL for the job to ensure that the correct unload data set is specified. Verify that the correct level of DB2 is up.

Severity: 8 (error)
System Action: Utility processing terminates.
User Response: Fall back to the previous release. Migrate only from DB2 releases from which migration is supported.

Severity: 8 (error)
System Action: Utility processing terminates.
User Response: Fall back to the previous release. Migrate only from DB2 releases from which migration is supported.

Severity: 0 (informational)
System Action: Processing ends.
**DSNU767I**  
**cssect-name DB2 SYSTEM MUST BE STARTED ACCESS(MAINT)**

**Explanation:** In order for the utility to execute, the DB2 subsystem must be started with ACCESS(MAINT). This message indicates that the subsystem was not started in this manner.

**Severity:** 8 (error)

**System Action:** -STOP DB2, and then -START DB2 with ACCESS(MAINT).

---

**DSNU768I**  
**cssect-name CATMAINT CONVERT COMPLETE FOR INDEX index-name**

**Explanation:** The conversion is complete for index index-name.

**Severity:** 0 (informational)

**System Action:** Processing continues with the next index.

---

**DSNU769I**  
**cssect-name THE BUILD PHASE FAILED FOR INDEX index-name REASON reason**

**Explanation:** The CATMAINT CONVERT build phase failed for index index-name. This message and others identify the actions that should be taken.

**Severity:** 8 (error)

**Operator Response:** Note the reason code and the index name. See the Problem Determination section for an explanation of the collected data.

**System Action:** Utility processing continues with the next index and will terminate with return code 8.

**User Response:** Correct the problem indicated by the reason code. Either resubmit the CATMAINT CONVERT job or recover the index that failed.

**Problem Determination:** The reason the build phase failed is identified by the reason code, which is described in [Section 4. DB2 Codes](#) on page 577.

---

**DSNU770I**  
**cssect-name - DBD type BASE FOR DATABASE database**

**Explanation:** This message marks the start of the REPAIR DBD type utility. In the message, ‘type’ can be DIAGNOSE, REBUILD, or TEST. The database name specified in the REPAIR statement is ‘database’.

**Severity:** 0 (informational)

**System Action:** Utility processing continues normally.

---

**DSNU771I**  
**cssect-name - DBD type COMPLETE FOR DATABASE database**

**Explanation:** This message marks the completion of the REPAIR DBD type utility. In the message, ‘type’ can be DIAGNOSE, REBUILD, or TEST. The database name specified in the REPAIR statement is ‘database’.

**Severity:** 0 (informational)

**System Action:** Utility processing continues normally.

---

**DSNU772I**  
**cssect-name - THE object-type qualifier.object-name IS UNAVAILABLE IN THIS RELEASE**

**Explanation:** This message indicates that the specified object has a dependency on a release from which fall back has occurred, and cannot be operated upon in the current release.

**Severity:** 8 (error)

**System Action:** Utility processing terminates.

**User Response:** Check the IBMREQD column of the catalog table associated with the specified object type. If the value in the catalog table is the release dependency mark for a release of DB2 from which fall back has occurred, the utility is not operational for the current release of the targeted database.

---

**DSNU773I**  
**cssect-name - database IS A SYSTEM DATABASE AND CANNOT BE PROCESSED**

**Explanation:** The database indicated is not eligible for processing by the type of the REPAIR DBD utility involved.

**Severity:** 8 (error)

**System Action:** Utility processing terminates.

**User Response:** Ensure that the utility control statement specifies the correct database.

---

**DSNU774I**  
**cssect-name - SPECIFIED DATABASE database NOT FOUND**

**Explanation:** The database indicated by the utility control statement was not found in catalog table SYSiBM.SYSDATABASE.

**Severity:** 8 (error)

**System Action:** Utility processing terminates.

**User Response:** Ensure that the database indicated by the utility control statement exists in SYSiBM.SYSDATABASE.

---

**DSNU775I**  
**cssect-name - DROP OF DATABASE dbname FAILED WITH SQLCODE = sqlcode**

**Explanation:** An error was encountered while using the REPAIR DBD DROP utility to drop DATABASE ‘dbname’. The SQL error code is indicated by ‘sqlcode’.

**Severity:** 8 (error)

**System Action:** DATABASE ‘dbname’ is not dropped.

**User Response:** For a description of the SQL error code that was issued, refer to [Section 2. SQL Return Codes](#) on page 17.

---

**DSNU776I**  
**cssect-name CATMAINT operation ERROR - error-text**

**Explanation:** The CATMAINT utility was terminated because the catalog contains one or more of the following (indicated by error-text):

- Type 1 indexes
- Data set passwords
- Shared read-only data

**Severity:** 0 (informational)

**System Action:** Utility processing terminates.

**User Response:** Convert all type 1 indexes to type 2, remove all data set passwords, and convert all shared read-only data.
Then retry the failing CATMAINT operation. This message is followed by an abend04E RC00E40601. See the problem determination text of RC00E40601 for additional information.

**DSNU777I**
csect-name CATMAINT operation STATAS
status-msg

**Explanation:** The CATMAINT utility is processing CATMAINT operation. status-msg indicates where CATMAINT is in the operation process.

**Severity:** 0 (informational)

**System Action:** Utility processing continues normally.

**DSNU778I**
csect-name - ERROR PROCESSING SQL STATEMENT -
SQL CODE IS: sql-code
SQL MESSAGE TOKENS: message-token(s)
THE FOLLOWING IS THE PROBLEM SQL STATEMENT:
sql-statement

**Explanation:** There was a utility abend in the DB2 database services address space (ssnmDBM1) during CATMAINT UPDATE processing. The message-tokens displayed are those found in the SQLERRMT field of the SQLCA, separated by commas, for the indicated SQLCODE sql-code. The problem SQL statement sql-statement is also displayed.

**Severity:** 0 (informational)

**System Action:** Utility processing abends.

**User Response:** This message is followed by an abend04E RC00E40601. The sql-code, message-tokens, and sql-statement listed in this message are probably sufficient to diagnose and correct the problem. See the problem determination text of RC00E40601 for additional information.

**DSNU780I**
csect-name DSNUTILB LEVEL rel1 INVALID WITH SUBSYSTEM LEVEL rel2

**Explanation:** JCL has been submitted which executes level 'rel1' of DSNUTILB against a level 'rel2' DB2 subsystem. The levels must match.

**Severity:** 8 (error)

**System Action:** The utility terminates with a return code of 8.

**User Response:** Determine the DB2 subsystem against which you wish to execute. Determine which STEPLIB data set contains the corresponding DSNUTILB load module. Correct the JCL to specify the correct data set on the STEPLIB DD statement and the correct DB2 subsystem on the EXEC statement and resubmit the job.

**DSNU781I**
csect-name RESTART OF LEVEL rel1 UTILITY AT LEVEL rel2 INVALID

**Explanation:** JCL has been submitted which attempts to RESTART a stopped utility. The utility began processing at level 'rel1' and cannot be restarted at level 'rel2'.

**System Action:** The utility job is abended with reason code X’00E40018’.

**User Response:** Either restart the utility at the same level it was originated or terminate the utility with the TERM command and resubmit it at the new level. Refer to DB2 Command Reference for special TERM command considerations.

**DSNU782I**
csect-name UNABLE TO RECOVER DUE TO ACTIVITY AT ANOTHER SYSTEM LEVEL

**Explanation:** The RECOVER utility is unable to recover the specified table space. Activity at another system level has left all image copies for this table space inconsistent with the DB2 LOG.

**Severity:** 8 (error)

**System Action:** The utility terminates with a return code of 8.

**User Response:** The table space, in its entirety cannot be recovered. Individual data sets may be recoverable using the DSNM() keyword.

**DSNU783I**
csect-name Indexes DSNSTC02, DSNLUX01, DSNLUX02 and DSNLLX02 have SUBPAGES value greater than 1 and cannot become GROUP BUFFER POOL DEPENDENT.

**Explanation:** CATMAINT CONVERT TO TYPE 1 DIRECTION alters the indexes DSNSTC02, DSNLUX01, DSNLUX02, and DSNLLX02 to type 1 with more than one subpage. In a data sharing environment, there cannot be inter-DB2 R/W interest on type 1 indexes with more than one subpage (they cannot become group buffer pool dependent). This means that any read or update request that causes inter-DB2 R/W interest on these directory indexes is denied with a 'resource unavailable' condition.

For directory indexes, only type 2 indexes can have full R/W sharing among data sharing members.

**Severity:** 4 (warning)

**System Action:** Processing continues.

**User Response:** With very few exceptions, indexes on the directory will have inter-DB2 R/W interest if there are two or more members in your DB2 data sharing group. Use CATMAINT CONVERT TO TYPE 2 DIRECTORY to convert the indexes to type 2 if you plan to have two or more DB2 members.

**DSNU785I**
csect-name - PAGE=page-number IS INVALID FOR REASON=reason-code

**Explanation:** The CHECK LOB utility found the LOB table space page numbered page-number was invalid for reason reason-code. reason-code can be in the form: reason1, reason2. This reason code is supplied for serviceability only.

**System Action:** Utility returns completion code=4. LOB table space is set check pending.

**Programmer Response:** Notify the system programmer.

**System Programmer Response:** Notify the IBM Service Representative. Be prepared to provide the message number, reason code, and dump of the LOB table space page.

```bash
# DSNU787I csect-name - LOB WITH ROWID=rowid
# VERSION=version PAGE=page IS IN ERROR
# FOR REASON=reason-code, EXPECTED
# VALUE=expected-value ACTUAL
# VALUE=actual-value

**Explanation:** The CHECK LOB utility found that the LOB with ROWID rowid and VERSION version is in error for reason reason-code. The error was found in page page of the LOB table space. This reason code is supplied for serviceability only.
```
The REPAIR utility can be used to reset the Aux Warning state. If all Auxiliary Column Check errors were corrected, Aux Warning will be reset.

System Action: Utility returns completion code=4. The base table space is set to a Aux Warning state.

Programmer Response: None

Use SQL to update the LOB column or delete the base table row. Rerun the CHECK DATA utility with AUXERROR INVALIDATE specified. If all Auxiliary Column Check errors were corrected, Aux Warning will be reset.

The REPAIR utility can be used to reset the Aux Warning state.

If AUXERROR INVALIDATE was specified, the LOB column is set invalid. The base table space is set to an Aux Warning state.

Utility returns completion code=4.

Programmer Response: CHECK DATA relies on information in LOB table space and in the auxiliary index being correct. Before running CHECK DATA to check auxiliary columns, first run CHECK LOB and then run REBUILD INDEX or CHECK INDEX. CHECK LOB ensures the validity of the LOB table space. REBUILD INDEX or CHECK INDEX ensures the validity of the auxiliary index.

If AUXERROR REPORT was specified, run the CHECK DATA utility with AUXERROR INVALIDATE to set the base table column invalid.

If AUXERROR INVALIDATE was specified, use SQL to update the LOB column or delete the base table row. Rerun the CHECK DATA utility with AUXERROR INVALIDATE specified. If all Auxiliary Column Check errors were corrected, Aux Warning will be reset.

The REPAIR utility can be used to reset the Aux Warning state.

If AUXERROR INVALIDATE was specified, the LOB column was marked invalid by a prior execution of the CHECK DATA utility with AUXERROR INVALIDATE specified. The version for the LOB column was version.

System Action: Utility returns completion code=4. LOB table space is set invalid. The base table space is set to an Aux Warning state.

Programmer Response: Notify the system programmer.

System Programmer Response: Notify the IBM Service Representative. Be prepared to provide the message number and reason code.

The REPAIR utility can be used to reset the Aux Warning state.

If all Auxiliary Column Check errors were corrected, Aux Warning will be reset.

System Action: Utility returns completion code=4. LOB table space is set invalid. The base table space is set to an Aux Warning state.

Programmer Response: Notify the system programmer.

System Programmer Response: Notify the IBM Service Representative. Be prepared to provide the message number and reason code.
The LOB can be deleted from the LOB table space by using the REPAIR utility. Specify the validity of the index on the auxiliary table, should be corrected. Both CHECK LOB, to ensure the validity of the LOB table space, and REBUILD INDEX or CHECK INDEX, to correct. Before running CHECK DATA to check auxiliary table space being correct.

Programmer Response: If AUXERROR INVALIDATE was specified, use SQL to update the LOB column or delete the base table row. Rerun the CHECK DATA utility with AUXERROR INVALIDATE specified. If all Auxiliary Column Check errors were corrected, Aux Warning will be reset.

System Action: Utility returns completion code=4. The base table space is set to a Aux Warning state.

Explanation: The CHECK DATA utility found a LOB in the LOB table space named lob_table_space_name but did not find a row in the base table for this LOB. The LOB has a ROWID of rowid and version of version.


Explanation: The CHECK DATA utility found a record in the table named table_name in the row with a ROWID of rowid. The column named column_name was indicated null or zero length, but an index entry with the same ROWID was found in the index on the auxiliary table named index_name. The version for the LOB column was version.

System Action: This is an informational message only. The fact that a LOB column entry exists in the index on the auxiliary table when the LOB column is marked null or has a null length does not hinder LOB column processing.

If AUXERROR INVALIDATE was specified, the LOB column is not set invalid for this error.

Utility returns completion code=4.

Explanation: If the RECOVER utility issued this message, the corresponding table space to this index was recovered to a point in time with keyword TOCOPY, TOLOGPOINT, or TORBA. Thus, the index was placed in rebuild pending status.

System Action: Processing continues.

Explanation: The CHECK DATA utility found auxiliary check errors. AUXERROR INVALIDATE was specified, so LOB columns in error were marked invalid.

Auxiliary warning is a non-prohibitive state. Updating the LOB column or deleting the row containing the LOB column by SQL is permitted. Valid LOBs may be accessed, however any attempt to retrieve an invalid modified LOB column by SQL will result in a -904 return code.

Previous error messages report the errors found.

Severity: 0 (informational)

System Action: Processing continues.

Explanation: Use SQL to update or delete the LOB columns in error. Use CHECK DATA with AUXERROR INVALIDATE to verify all errors were corrected and to reset the auxiliary warning state.

The auxiliary warning state can also be reset using REPAIR with SET NOAUXWARN.

Explanation: If the REORG utility with SHRLEVEL REFERENCE or CHANGE (or -TERM UTILITY) issued this message, the index is in rebuild pending status. During the renaming of a data set
during REORG, either a data set with the source name did not yet exist or a data set with the target name already existed.

Severity: 4 (warning) or 8 (error)

User Response: If the RECOVER or REORG utility (or -TERM UTILITY) issued this message, use the REBUILD INDEX utility to rebuild this index.

If the REBUILD INDEX utility issued this message resolve duplicate index entries or invalid keys and rerun the REBUILD INDEX utility.

---

DSNU831I  csect-name ALL INDEXES OF TABLESPACE= table-space-name are in REBUILD PENDING

Explanation: The RECOVER TORBA, TOLOGPOINT, or TOCOPY utility issues this message to inform the user of the state of all indexes belonging to the recovered table space. All indexes were put in rebuild pending status to prevent data and index inconsistency. All indexes should be rebuilt before they are used.

System Action: The RECOVER utility completed successfully.

Severity: 4 (warning)

User Response: Use the REBUILD utility with the ALL option to rebuild all indexes over the recovered table space.

---

DSNU832I  csect-name - INDEX= creator.index-name PART= partition number IS IN REBUILD PENDING STATE

Explanation: If the RECOVER utility issued this message, one partition of a partitioned table space is being recovered to a point in time with keyword TOCOPY, TOLOGPOINT, or TORBA. The corresponding index for that partition was placed in rebuild pending status.

If the REBUILD INDEX utility issued this message, the index or the partition of a cluster index is in rebuild pending status.

Either duplicate index entries existed during the BUILD phase of the REBUILD INDEX or INDEX PART, or invalid KEY/RIDs, which do not belong to the partition of the cluster index, were detected. The duplicate index entries or invalid KEY/RIDs entries must be resolved before starting the REBUILD INDEX utility again to rebuild the index and remove the index from rebuild pending status.

If the REORG utility with SHRLEVEL REFERENCE or CHANGE (or -TERM UTILITY) issued this message, one partition of a partitioned index was placed in rebuild pending status.

During the renaming of a data set during REORG, either a data set with the source name did not yet exist or a data set with the target name already existed.

Severity: 4 (warning) or 8 (error)

User Response: If the RECOVER or REORG utility (or -TERM UTILITY) issued the message, rebuild this index with the REBUILD INDEX utility.

If the REBUILD INDEX utility issued this message resolve duplicate index entries or invalid keys and rerun the REBUILD INDEX utility.
**DSNU865I** csect-name DISPLAY OBD dbname.tsname COMPLETE  
Explanation: This message is issued in response to normal completion of DISPLAY OBD processing.  
Severity: 0 (informational)  
System Action: This message indicates the end of DISPLAY OBD processing.

**DSNU866I** csect-name DISPLAY SYSUTIL JOB INFORMATION  
Explanation: This message is the header message for the SYSUTIL JOB INFORMATION section of the DIAGNOSE DISPLAY SYSUTIL output. This section displays the job information area of the SYSUTIL record and contains information which identifies the utility the SYSUTIL record is referencing.  
Severity: 0 (informational)  
System Action: This message identifies the SYSUTIL JOB INFORMATION section of the DIAGNOSE DISPLAY SYSUTIL output.

**DSNU867I** csect-name DISPLAY SYSUTIL CHECKPOINT/RESTART INFORMATION  
Explanation: This message is the header message for the SYSUTIL UTILITY CHECKPOINT/RESTART INFORMATION section of the DIAGNOSE DISPLAY SYSUTIL output. This section displays the utility checkpoint/restart area of the SYSUTIL record and contains information pertaining to utility processing needed for the restart of the utility.  
Severity: 0 (informational)  
System Action: This message identifies the SYSUTIL UTILITY CHECKPOINT/RESTART INFORMATION section of the DIAGNOSE DISPLAY SYSUTIL output.

**DSNU868I** csect-name DISPLAY SYSUTIL UTILITY DEPENDENT AREA  
Explanation: This message is the header message for the SYSUTIL UTILITY DEPENDENT INFORMATION section of the DIAGNOSE DISPLAY SYSUTIL output. This section displays the utility dependent area of the SYSUTIL record and contains information particular to the utility which the SYSUTIL record is referencing.  
Severity: 0 (informational)  
System Action: This message identifies the SYSUTIL UTILITY DEPENDENT INFORMATION section of the DIAGNOSE DISPLAY SYSUTIL output.

**DSNU869I** csect-name DISPLAY SYSUTIL COMPLETE  
Explanation: This message is issued in response to normal completion of DISPLAY SYSUTIL processing.  
Severity: 0 (informational)  
System Action: This message indicates the end of DISPLAY SYSUTIL processing.

**DSNU870I** csect-name NO SYSUTIL RECORD FOUND  
Explanation: This message is issued if no SYSUTIL records are found when DISPLAY SYSUTIL is specified.  
Severity: 4 (warning)  
System Action: This message indicates the end of DISPLAY SYSUTIL processing.

**DSNU871I** csectname DISPLAY DBET DATABASE dbname  
Explanation: This message is the heading for display output of the database exception table (DBET) entry associated with database dbname.  
Severity: 0 (informational)  
System Action: DIAGNOSE DISPLAY DBET processing started for the named database.

**DSNU872I** csectname DISPLAY DBET TABLE SPACE tsname  
Explanation: This message is the heading for display output of the database exception table (DBET) entry associated with table space tsname.  
Severity: 0 (informational)  
System Action: DIAGNOSE DISPLAY DBET processing started for the named table space.

**DSNU873I** csectname DISPLAY DBET INDEX index-name  
Explanation: This message is the heading for display output of the database exception table (DBET) entry associated with index index-name.  
Severity: 0 (informational)  
System Action: DIAGNOSE DISPLAY DBET processing started for the named index.

**DSNU874I** csectname NO DBET ENTRY FOUND FOR THE SPECIFIED OBJECT  
Explanation: There is no database exception table (DBET) entry associated with the specified object.  
Severity: 4 (warning)  
System Action: Processing continues normally.

**DSNU875I** csectname DIAGNOSE WAIT AT MESSAGE=msgno INSTANCE=nn CORR ID=id1 CONN ID=id2 REPLY TO CONT  
Explanation: The DIAGNOSE WAIT function was invoked to wait at a specified message ‘msgno’ on the nn'th time that message was issued. The CORR ID is the correlation identifier of the thread associated with the waiting application. The CONN ID is the connection identifier of the thread.  
Severity: 4 (warning)  
System Action: Processing is stopped until the user responds to this message.  
User Response: See operator response.  
Operator Response: After diagnosis procedure in progress is completed, reply to this message to continue execution. Any reply is valid.
DSNU876I  csect-name  DIAGNOSE WAIT AT TRACEID=X’trcid’! INSTANCE=nn CORR ID=id1  CONN ID=id2  REPLY TO CONT

Explanation: The DIAGNOSE WAIT function was invoked to wait at a specified traceid ‘trcid’ on the nn’th time that traceid was encountered. The CORR ID is the correlation identifier of the thread associated with the waiting application. The CONN ID is the connection identifier of the thread.

Severity:  4 (warning)
System Action: Processing is stopped until the user responds to this message.
User Response: See operator response.
Operator Response: After diagnosis procedure in progress is complete, reply to this message to continue execution. Any reply is valid.

DSNU877I  event modulename+offset

Explanation: Event ‘event’ occurred at module ‘modulename’ plus ’offset’. The DIAGNOSE utility issues this message to aid in diagnosing utility problems.

Severity:  0 (informational)
System Action: Processing continues normally.

DSNU900I  csect-name - DBD X’xxxxx’ COMPARISON STARTING

Explanation: This message marks the start of a DBD comparison for the REPAIR DBD TEST or REPAIR DBD DIAGNOSE utility. The DBID of the DBD being compared against the DB2 Catalog is ‘xxxx’.

Severity:  0 (informational)
System Action: DBD checking continues normally.

DSNU901I  csect-name - OBD X’xxxxx’ obd-type HAS THE FOLLOWING DIFFERENCES

Explanation: This message marks the start of an OBD comparison for the REPAIR DBD TEST or REPAIR DBD DIAGNOSE utility. This message is displayed when a difference in the OBDs has been detected. The OBD of the OBD being compared against the DB2 catalog is ‘xxxx’. The type of OBD being displayed is ‘obd-type’.

Severity:  0 (informational)
System Action: DBD checking continues normally.

DSNU902I  csect-name - EXISTING OBD AT OFFSET X’xxxxxxx’ IN EXISTING DBD

Explanation: Following this message is a hexadecimal dump of the OBD as it exists in the DSNDDB01.DBD01 page set. In the message, ‘xxxxxxx’ is the hexadecimal offset from the beginning of the existing DBD as it appears later in the REPAIR DBD DIAGNOSE output.

Severity:  0 (informational)
System Action: DBD checking continues normally.

DSNU903I  csect-name - REBUILT OBD AT OFFSET X’xxxxxxx’ IN REBUILT DBD

Explanation: Following this message is a hexadecimal dump of the OBD that was rebuilt from the DB2 Catalog. In the message, ‘xxxxxxx’ is the hexadecimal offset from the beginning of the rebuilt DBD as it appears later in the REPAIR DBD DIAGNOSE output.

Severity:  0 (informational)
System Action: DBD checking continues normally.

DSNU904I  csect-name - EXISTING VALUE X’xx..xx’

Explanation: This message shows a hexadecimal string which is the value of a field in the OBD as it exists on the DSNDDB01.DBD01 page set. The hexadecimal string is ‘xx..xx’.

Severity:  0 (informational)
System Action: DBD checking continues normally.

DSNU905I  csect-name - REBUILT VALUE X’xx..xx’

Explanation: This message shows a hexadecimal string which is the value of a field in the OBD which was rebuilt from the DB2 catalog. The hexadecimal string is ‘xx..xx’.

Severity:  0 (informational)
System Action: DBD checking continues normally.

DSNU906I  csect-name - EXISTING VALUE ‘cc..cc’

Explanation: This message shows a character string which is the value of a field in the OBD as it exists on the DSNDDB01.DBD01 page set. The character string is ‘cc..cc’.

Severity:  0 (informational)
System Action: DBD checking continues normally.

DSNU907I  csect-name - REBUILT VALUE ‘cc..cc’

Explanation: This message shows a character string which is the value of a field in the OBD which was rebuilt from the DB2 catalog. The character string is ‘cc..cc’.

Severity:  0 (informational)
System Action: DBD checking continues normally.

DSNU908I  csect-name - EXISTING OBD IS obd-type

Explanation: This message shows the OBD type of the OBD which exists on the DSNDDB01.DBD01 page set.

Severity:  0 (informational)
System Action: DBD checking continues normally.

DSNU909I  csect-name - REBUILT OBD IS obd-type

Explanation: This message shows the OBD type of the OBD which was rebuilt from the DB2 catalog.

Severity:  0 (informational)
System Action: DBD checking continues normally.
DSNU910I  csect-name - EXISTING DBD
Explanation: Following this message is a hexadecimal dump of the DBD which exists on the DSNDDB01.DBD01 page set.
Severity: 0 (informational)
System Action: DBD checking continues normally.

DSNU911I  csect-name - REBUILT DBD
Explanation: Following this message is a hexadecimal dump of the DBD which was rebuilt from the DB2 Catalog.
Severity: 0 (informational)
System Action: DBD checking continues normally.

DSNU912I  csect-name - phase-completion-message -- nn ERRORS WERE FOUND
Explanation: This message marks the end of a processing phase in the DBD comparison for a REPAIR DBD TEST or REPAIR DBD DIAGNOSE utility. In the message, ‘nn’ indicates the number of errors detected while processing. Informational and warning messages are not added into the error count.
Severity: 0 (informational)
System Action: DBD checking continues normally.

DSNU913I  csect-name - OBD X'xxxx' COMPARISON COMPLETE -- nn ERRORS WERE FOUND
Explanation: This message marks the end of an OBD comparison for the REPAIR DBD TEST or REPAIR DBD DIAGNOSE utility. This message is displayed only when a difference has been detected. If there is no difference, this message will not be displayed. The OBID of the OBD being compared against the DB2 catalog is ‘xxxx’. The number of errors in this OBD is ‘nn’. Informational and warning messages are not added into the error count.
Severity: 0 (informational)
System Action: DBD checking continues normally.

DSNU914I  csect-name - DBD X'xxxx' COMPARISON COMPLETE -- nn ERRORS WERE FOUND
Explanation: This message marks the end of a DBD comparison for the REPAIR DBD TEST or REPAIR DBD DIAGNOSE utility. The DBID of the DBD being compared against the DB2 catalog is ‘xxxx’. The total number of errors found in this DBD is ‘nn’.
Severity: 0 (informational)
System Action: DBD checking completed.

DSNU915I  csect-name - OBD X'obid' E-X'xxxxxxx' R-X'yyyyyy' obd-description
Explanation: This message is used when listing the OBDS in the REPAIR DBD DIAGNOSE utility. The OBID of the OBD being listed is ‘obid’. The offset to the OBD within the EXISTING DBD which is displayed later in the output is ‘xxxxxxx’. The offset to the OBD within the REBUILT DBD which is displayed later in the output is ‘yyyyyy’. A short description of the state of the OBD is ‘obd-description’.
Severity: 0 (informational)
System Action: DBD checking continues normally.

DSNU916I  csect-name - OBDS DIFFER AT OFFSET X'xxxxxxx' field-name - INFORMATION NOT IN DB2 CATALOG
Explanation: This message indicates the value of a field in the OBD differs from the DBD which exists on the DSNDDB01.DBD01 page set and the DBD rebuilt from the DB2 catalog. This is information which is not kept in the DB2 catalog. This is an acceptable difference and does not indicate that the OBD is damaged. The hexadecimal offset from the beginning of the OBD is ‘xxxxxxx’. The name of the field is ‘field-name’.
Severity: 0 (informational)
System Action: DBD checking continues normally.

DSNU917I  csect-name - DBDS DIFFER AT OFFSET X'xxxxxxx' field-name - INFORMATION NOT IN DB2 CATALOG
Explanation: This message indicates the value of a field in the DBD differs from the DBD which exists on the DSNDDB01.DBD01 page set and the DBD rebuilt from the DB2 catalog. This is information which is not kept in the DB2 catalog. This is an acceptable difference and does not indicate that the DBD is damaged. The hexadecimal offset from the beginning of the DBD is ‘xxxxxxx’. The name of the field is ‘field-name’.
Severity: 0 (informational)
System Action: DBD checking continues normally.

DSNU919I  csect-name - DBD X'xxxx' OBD X'yyy' - details
Explanation: This message gives detailed information about the specified OBD. The DBID of the OBD is ‘xxxx’. The OBID of the OBD is ‘yyy’. A description of the error is ‘details’.
Severity: 0 (informational)
System Action: DBD checking continues normally.

DSNU920I  csect-name - OBDS DIFFER AT OFFSET X'xxxxxxx' field-name
Explanation: This message indicates that the value of a field in the OBD differs from the DBD which exists on the DSNDDB01.DBD01 page set and the DBD rebuilt from the DB2 catalog. The DB2 Catalog and DBD/OBD are inconsistent. The hexadecimal offset from the beginning of the OBD is ‘xxxxxxx’. The name of the field is ‘field-name’.
Severity: 4 (warning)
System Action: DBD checking continues normally.

DSNU921I  csect-name - OBD X'xxxx' MISSING IN EXISTING DBD
Explanation: This message indicates that an OBD which was rebuilt from the DB2 catalog does not exist in the DBD which exists on the DSNDDB01.DBD01 page set. The DB2 catalog and DBD/OBD are inconsistent. The OBID of the missing OBD is ‘xxxx’.
Severity: 4 (warning)
System Action: DBD checking continues normally.
<table>
<thead>
<tr>
<th><strong>DSNU922I</strong></th>
<th><code>csect-name</code> OBD X‘xxxx’ MISSING IN REBUILT DBD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explanation:</strong></td>
<td>This message indicates that an OBD in the DBD which exists on the DSNDB01.DBD01 page set does not exist in the DBD which was rebuilt from the DB2 catalog. The DB2 catalog and DBD/OBD are inconsistent. The OBID of the missing OBD is ‘xxxx’.</td>
</tr>
<tr>
<td><strong>Severity:</strong></td>
<td>4 (warning)</td>
</tr>
<tr>
<td><strong>System Action:</strong></td>
<td>DBD checking continues normally.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>DSNU923I</strong></th>
<th><code>csect-name</code>—OBDTYPE FOR OBD X‘xxxx’ DOES NOT MATCH—NO FURTHER CHECKING DONE FOR THIS OBD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explanation:</strong></td>
<td>The object descriptor (OBD) that exists on the DSNDB01.DBD01 page set does not point to a FILE OBD. The DB2 catalog and database descriptor (DBD)/OBD are inconsistent. The object identifier (OBID) of the OBD that is inconsistent is ‘xxxx’.</td>
</tr>
<tr>
<td><strong>Severity:</strong></td>
<td>4 (warning)</td>
</tr>
<tr>
<td><strong>System Action:</strong></td>
<td>Checking for OBID X‘xxxx’ stops. Checking of the DBD continues normally.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>DSNU924I</strong></th>
<th><code>csect-name</code>—DBDS DIFFER AT OFFSET X‘xxxxxx’ field-name</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explanation:</strong></td>
<td>The value of a field in the database descriptor (DBD) differs from the value of the corresponding field in the DBD that was rebuilt from the DB2 catalog. No further processing can be done because the fields of one OBD type are different from the fields of another. The DB2 catalog and database descriptor (DBD)/OBD are inconsistent. The object identifier (OBID) of the OBD that is inconsistent is ‘xxxx’.</td>
</tr>
<tr>
<td><strong>Severity:</strong></td>
<td>0 (informational)</td>
</tr>
<tr>
<td><strong>System Action:</strong></td>
<td>Checking of the DBD continues normally.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>DSNU925I</strong></th>
<th><code>csect-name</code>—OBDDFILE AT OFFSET X‘xxxxxx’ IN EXISTING DBD HAS OBID X’nnnn’ WHICH IS NOT A FILE OBD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explanation:</strong></td>
<td>The field that points to the first FILE OBD (OBDDFILE) in the database descriptor (DBD) that was rebuilt from the DB2 catalog does not point to a FILE OBD. The DB2 catalog and DBD/OBD (object descriptor) are inconsistent.</td>
</tr>
<tr>
<td><strong>Severity:</strong></td>
<td>4 (warning)</td>
</tr>
<tr>
<td><strong>System Action:</strong></td>
<td>Checking of the DBD continues normally.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>DSNU926I</strong></th>
<th><code>csect-name</code>—OBDDFILE AT OFFSET X‘xxxxxx’ IN REBUILT DBD HAS OBID X’nnnn’ WHICH IS NOT A FILE OBD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explanation:</strong></td>
<td>The field that points to the first FILE OBD (OBDDFILE) in the database descriptor (DBD) that was rebuilt from the DB2 catalog does not point to a FILE OBD. The DB2 catalog and DBD/OBD (object descriptor) are inconsistent.</td>
</tr>
<tr>
<td><strong>Severity:</strong></td>
<td>4 (warning)</td>
</tr>
<tr>
<td><strong>System Action:</strong></td>
<td>Checking of the DBD continues normally.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>DSNU927I</strong></th>
<th><code>csect-name</code> OBD X‘xxxx’ IS A HOLE IN EXISTING DBD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explanation:</strong></td>
<td>The object descriptor (OBD) that exists on the DSNDB01.DBD01 page set has been logically deleted, OBDDHOLE = ‘1’B. The DB2 catalog and database descriptor (DBD)/OBD are inconsistent. The object identifier (OBID) of the OBD that is a hole is ‘xxxx’.</td>
</tr>
<tr>
<td><strong>Severity:</strong></td>
<td>4 (warning)</td>
</tr>
<tr>
<td><strong>System Action:</strong></td>
<td>Checking of the DBD continues normally.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>DSNU928I</strong></th>
<th><code>csect-name</code> OBD X‘xxxx’ IS A HOLE IN REBUILT DBD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explanation:</strong></td>
<td>The object descriptor (OBD) that was rebuilt from the DB2 catalog has been logically deleted, OBDDHOLE = ‘1’B. The DB2 catalog and database descriptor (DBD)/OBD are inconsistent. The object identifier (OBID) of the OBD that is a hole is ‘xxxx’.</td>
</tr>
<tr>
<td><strong>Severity:</strong></td>
<td>4 (warning)</td>
</tr>
<tr>
<td><strong>System Action:</strong></td>
<td>Checking of the DBD continues normally.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>DSNU929I</strong></th>
<th><code>csect-name</code>—OBD FIELD field-name HAS VALUE OUT OF RANGE AT OFFSET X‘xxxxxx’ IN OBD X’nnnn’</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explanation:</strong></td>
<td>The object descriptor (OBD) field ‘field-name’ has an unexpected value. The DB2 catalog and database descriptor (DBD)/OBD are inconsistent.</td>
</tr>
<tr>
<td><strong>Severity:</strong></td>
<td>4 (warning)</td>
</tr>
<tr>
<td><strong>System Action:</strong></td>
<td>Checking of the DBD continues normally.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>DSNU930I</strong></th>
<th><code>csect-name</code>—INDEX index-name (OBD X‘xxxx’) MUST BE REBUILD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explanation:</strong></td>
<td>The index ‘index-name’ must be either recovered or dropped and recreated to ensure that the index is consistent with the description in the INDEX FANSET OBD. The object descriptor (OBD) is not damaged. However, if the index is not either recovered or dropped and recreated, incorrect output can be produced when the index is used as an access path.</td>
</tr>
<tr>
<td><strong>Severity:</strong></td>
<td>4 (warning)</td>
</tr>
<tr>
<td><strong>System Action:</strong></td>
<td>Checking of the DBD continues normally.</td>
</tr>
</tbody>
</table>
DSNU931I  csect-name - OBDDMAX FIELD OF DBD IS TOO LARGE
Explanation: The OBDDMAX field (maximum number of ID in the DBD) is too large. It is larger than the largest possible number of ID based upon the DBD size.
Severity: 8
System Action: Checking of the DBD continues normally.
User Response: Stop the database. Then start the database with the ACCESS(UT) option. Resubmit the REPAIR DBD job.

DSNU935I  csect-name DATABASE database-name IS NOT STARTED FOR UTILITY PROCESSING ONLY
Explanation: This message is issued when the REPAIR utility option is run on a database that is not started for utility processing only.
Severity: 8
System Action: REPAIR DBD terminated.
User Response: Stop the database. Then start the database with the ACCESS(UT) option. Resubmit the REPAIR DBD job.

DSNU936I  csect-name DATABASE database-name IS IN USE
Explanation: This message is issued when the REPAIR utility option is run on a database that is in use by others.
Severity: 8
System Action: REPAIR DBD terminated.
User Response: Wait until all users are finished, then resubmit the REPAIR DBD job.

DSNU938I  csect-name—OBD X ‘xxxx’ HAD DIFFERENCES WHICH WERE NOT IN A NAMED FIELD
Explanation: There is a difference between the object descriptor (OBD) in the database descriptor (DBD) that exists on the DSNDB01.DBD01 page set and the DBD that was rebuilt from the DB2 catalog. This difference does not exist in a named field. Therefore, the detailed search by field name fails to find the difference. The DB2 catalog and DBD/OBD are inconsistent. The object identifier (OBID) of the OBD in error is ‘xxxx’.
Severity: 4 (warning)
System Action: Checking of the DBD continues normally.

DSNU939I  csect-name—DBD HEADER HAD DIFFERENCES WHICH WERE NOT IN A NAMED FIELD
Explanation: There is a difference between the DBD header in the DBD that exists on the DSNDB01.DBD01 page set and the DBD that was rebuilt from the DB2 catalog. This difference does not exist in a named field. Therefore, the detailed search by field name fails to find the difference. The DB2 catalog and database descriptor (DBD)/object descriptor (OBD) are inconsistent.
**DSNU945I**  csect-name CREATE SUCCESSFUL FOR PROCEDURE procedure_name

**Explanation:** A SYSPROcedures row with a value of procedure_name, in column PROCEDURE has been successfully migrated.

**System Action:** SYSPROcedures migration continues normally.

**Problem Determination:** The utility being processed requested the setting of check pending either on or off. The updating of the STATUS column of SYSTABLESPACE, and of the CHECKFLAG and CHECKRID columns of SYSTABLES and SYSTABLEPART failed. Processing continues normally. However, those columns for the rows being updated still contain invalid values. Subsequent utility processing ignores these values, and the next setting or resetting of check pending for that table space corrects the error in one of the following ways:

- If the table space is set to check pending and the catalog fields are in error, the scope of check pending is escalated in the catalog. (The STATUS column of SYSTABLESPACE is set to 'P', and the CHECKFLAG and CHECKRID columns of SYSTABLES and SYSTABLEPART are set to 'C' and binary zeros.)
- If the table space is set to not check pending and the catalog fields are in error, the scope of check pending is set off in the catalog. (The STATUS column of SYSTABLES is set to an 'A', and the CHECKFLAG and CHECKRID columns of SYSTABLES and SYSTABLEPART are set to blanks.)

After the catalog fields are corrected, the setting or resetting of check pending continues as specified.

Usually message DSNT500I or DSNT501I is also issued, because the probable cause of the error is RESOURCE UNAVAILABLE. If the reason for the failure was not RESOURCE UNAVAILABLE, an SVC dump is requested and processing continues normally. To determine the cause of the failure, refer to the dump listing and the following diagnostic items listed in Appendix B, "Problem determination" on page 1051.

**DSNU971I**  csect-name TABLESPACE dbname.tname IS CHECK PENDING OR AUX CHECK PENDING CORRELATION-ID id1 CONNECTION-ID id2 LUW-ID id3

**Explanation:** This message is sent to the console when TABLESPACE tname is set to CHECK pending or auxiliary CHECK pending state. The CORRELATION-ID id1 is the correlation identifier of the thread requesting CHECK pending or auxiliary CHECK pending status. Correlation IDs beginning with '0nn', where nn is a number from 01 to 28, identify system agents. The CONNECTION-ID id2 is the correlation identifier of the thread. The LUW-ID id3 is the logical-unit-of-work identifier of the thread. If the LUW-ID is an ' ', the thread has no LUW-ID. If it is not an ' ', the value is a logical-unit-of-work-id that is assigned to the thread followed by an '=' sign and a token value, which can be used in place of logical-unit-of-work-id in any DB2 command that accepts logical-unit-of-work-id as input.

**Severity:** 4 (warning)

**System Action:** Processing continues.

**User Response:** Refer to Section 2 (Volume 1) of DB2 Administration Guide for a discussion of the CHECK pending operation.

**DSNU972I**  csect-name CATALOG UPDATING FAILURE WHILE SETTING OR RESETING CHECK PENDING CORRELATION-ID id1 CONNECTION-ID id2

**Explanation:** When the check pending state is set on or off, the updating of the catalog tables (SYSTABLESPACE, SYSTABLES, and SYSTABLEPART) fails. The CORRELATION-ID, 'id1', is the correlation identifier of the thread associated with the application requesting that the check pending state be set on or off. The CONNECTION-ID, 'id2', is the correlation identifier of the application. Correlation IDs beginning with '0nn', where 'nn' is a number from 01 to 28, identify system agents.

**Severity:** 0 (informational) or 4 (warning)

**System Action:** Processing continues.

**Problem Determination:** The utility being processed requested the setting of check pending either on or off. The updating of the STATUS column of SYSTABLESPACE, and of the CHECKFLAG and CHECKRID columns of SYSTABLES and SYSTABLEPART failed. Processing continues normally. However, those columns for the rows being updated still contain invalid values. Subsequent utility processing ignores these values, and the next setting or resetting of check pending for that table space corrects the error in one of the following ways:

- If the table space is set to check pending and the catalog fields are in error, the scope of check pending is escalated in the catalog. (The STATUS column of SYSTABLESPACE is set to 'P', and the CHECKFLAG and CHECKRID columns of SYSTABLES and SYSTABLEPART are set to 'C' and binary zeros.)
- If the table space is set to not check pending and the catalog fields are in error, the scope of check pending is set off in the catalog. (The STATUS column of SYSTABLES is set to an 'A', and the CHECKFLAG and CHECKRID columns of SYSTABLES and SYSTABLEPART are set to blanks.)

After the catalog fields are corrected, the setting or resetting of check pending continues as specified.

Usually message DSNT500I or DSNT501I is also issued, because the probable cause of the error is RESOURCE UNAVAILABLE. If the reason for the failure was not RESOURCE UNAVAILABLE, an SVC dump is requested and processing continues normally. To determine the cause of the failure, refer to the dump listing and the following diagnostic items listed in Appendix B, "Problem determination" on page 1051.

**DSNU973I**  csect-name CHECK PENDING, AUX CHECK PENDING OR BOTH HAS BEEN RESET FOR TABLESPACE dbname.tname CORRELATION-ID id1 CONNECTION-ID id2 LUW-ID id3

**Explanation:** This message is sent to the console when CHECK pending, auxiliary CHECK pending or both states were reset for TABLESPACE tname. The CORRELATION-ID id1 is the correlation identifier of the thread requesting that the CHECK pending state, the auxiliary CHECK pending state or both states be reset. Correlation IDs beginning with '0nn', where 'nn' is a number from 01 to 28, identify system agents. The CONNECTION-ID id2 is the correlation identifier of the thread. The LUW-ID id3 is the logical-unit-of-work identifier of the thread. If the LUW-ID is an ' ', the thread has no LUW-ID. If it is not an ' ', the value is a logical-unit-of-work-id that is assigned to the thread followed by an '=' sign and a token value, which can be used in place of logical-unit-of-work-id in any DB2 command that accepts logical-unit-of-work-id as input.

**Severity:** 0 (informational)

**System Action:** Processing continues.

**User Response:** Refer to Section 2 (Volume 1) of DB2 Administration Guide for a discussion about clearing the CHECK pending status.

**DSNU993I**  csect-name IMAGE COPY RESTORE Terminated

**Explanation:** Catalog and directory initialization (image copy restore) did not complete successfully.

**Severity:** 8 (error)

**System Action:** Processing terminates.

**User Response:** Examine other error messages associated with this job.

**DSNU994I**  csect-name IMAGE COPY RESTORE COMPLETE SUCCESSFULLY

**Explanation:** Catalog and directory initialization (image copy restore) completed successfully.

**Severity:** 0 (informational)
**DSNU995I**  
**csect-name VSAM PUT ERROR, RPLERREG = return-code, RPLERRCD = reason-code**

**Explanation:** VSAM PUT failed with the indicated return-code and reason-code.

**Severity:** 8 (error)

**System Action:** Processing terminates.

**User Response:** Notify system programmer.

**System Programmer Response:** Follow standard VSAM diagnostic procedure. Refer to DFSMS/MVS: Macro Instructions for Data Sets. See also MVS/DFP V3R3 Diagnosis Guide for more information about the VSAM procedures.

**DSNU996I**  
**csect-name VSAM OPEN ERROR, ACBERRFLG = error-code**

**Explanation:** VSAM OPEN failed with the indicated ACB error-code.

**Severity:** 8 (error) if error is greater than or equal to 128; otherwise, 4 (warning)

**System Action:** Processing terminates if the error code is greater than or equal to 128; otherwise, processing continues normally.

**User Response:** Notify system programmer.

**System Programmer Response:** Follow standard VSAM diagnostic procedure. Refer to DFSMS/MVS: Macro Instructions for Data Sets. See also MVS/DFP V3R3 Diagnosis Guide for more information about the VSAM procedures.

**DSNU997I**  
**csect-name OUTPUT DATA SET NAME = data-set-name**

**Explanation:** The indicated data-set-name is used for output.

**Severity:** 0 (informational)

**DSNU998I**  
**csect-name INPUT DATA SET NAME = data-set-name**

**Explanation:** The indicated data-set-name is used for input.

**Severity:** 0 (informational)

**DSNU999I**  
**csect-name START OF IMAGE COPYRESTORE FOR JOB job-name step-name**

**Explanation:** The catalog and directory initialization (image copy restore) started.

**Severity:** 0 (informational)
DSNV... Messages

**DSNV029E** LOAD MODULE module-name DOES NOT HAVE AMODE(31) ATTRIBUTE

*Explanation:* During DB2 startup, Agent Services establishes the tasking structure for the control and resource manager address spaces. Three load modules, DSNVUES3, DSNVUES4, and DSNVRCI, are loaded and attached as the control programs for each subtask created. All three load modules must have been link-edited with the attributes AMODE(31) and RMODE(ANY). At least one of the modules did not have the 31-bit addressing attribute when it was loaded. The "module-name" in the error message is the alias name of the first load module whose addressing mode was invalid.

*System Action:* DB2 startup is terminated.

*System Programmer Response:* Verify that all installation and maintenance activities against these modules were executed using SMP, that the JCLIN for SMP includes the correct AMODE and RMODE control statements, and that the Linkage Editor provided with the Data Facility Product (DFP) for the version of MVS being used was invoked by SMP for the link-edits. Correct the procedure or JCL which caused the error and rerun the necessary SMP jobs.

*Operator Response:* Notify the system programmer of the failure.

*Problem Determination:* A DB2 dump was requested to a SYS1.DUMP data set.

Load module names and aliases are as follows:

<table>
<thead>
<tr>
<th>Load module</th>
<th>Alias</th>
</tr>
</thead>
<tbody>
<tr>
<td>DSNVUES3</td>
<td>DSNVUES3I</td>
</tr>
<tr>
<td>DSNVUES4</td>
<td>DSNVUES4I</td>
</tr>
<tr>
<td>DSNVRCI</td>
<td>DSNVRCI</td>
</tr>
</tbody>
</table>

The MVS service aid AMBLIST provides Linkage Editor module attributes in the summary section of the LISTLOAD function output.

**DSNV086E** DB2 ABNORMAL TERMINATION

*REASON=xxxxxxxx

*Explanation:* The DB2 subsystem is being abended, because an error that cannot be corrected has occurred. This message, which is not automatically deleted from the operator console, is issued during DB2 abnormal termination. 'REASON' is the subsystem termination reason code. If DB2 abnormal termination is invoked multiple times, the subsystem termination reason code that accompanies this message is the reason associated with the first invocation. For additional information, look up the reason code in "Section 4. DB2 Codes on page 577.

*System Action:* Abnormal termination processing continues.

*Operator Response:* Notify the system programmer, and restart DB2.

*System Programmer Response:* This message is accompanied by one or more dumps. Obtain a copy of SYS1.LOGREC after DB2 completely terminates; also obtain a copy of the SVC dump(s). If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

*Problem Determination:* Collect the following diagnostic items listed in "Appendix B, "Problem determination" on page 1051: 1, 5.

**DSNV400I** ARCHIVE LOG WITH MODE(QUIESCE) CURRENTLY ACTIVE

*Explanation:* An -ARCHIVE LOG MODE(QUIESCE) command is currently active. This message follows the DSNV401I message as part of the DISPLAY THREAD command report.

*System Action:* This message is issued as information only. The message indicates that the -ARCHIVE LOG MODE(QUIESCE) command has not completed, and consequently, updates against DB2 resources have been temporarily suspended. This may result in active threads being suspended awaiting termination of the quiesce period. DB2 processing otherwise continues normally.

**DSNV401I** DISPLAY THREAD REPORT FOLLOWS -

*Explanation:* This message is always generated as the title for the DISPLAY THREAD command report output. It precedes the other messages generated by this command.

*System Action:* Processing continues normally.

**DSNV402I** ACTIVE THREADS-

*Explanation:* This message precedes the listing of active threads.

The series of messages DSNV402I through DSNV405I provide the formatted report for the DISPLAY THREAD TYPE(ACTIVE) when the status of active threads is requested. The message indicates that the DISPLAY THREAD TYPE(ACTIVE) was specified, that the status requested was active, and that the report contains the specified threads.

*System Action:* Processing continues normally.

**DSNV403I** NAME ST A REQ ID AUTHID PLAN ASID TOKEN

*Explanation:* This message precedes the listing of active threads.

The series of messages DSNV444I through DSNV448I present the name, status, activity indication, request Id, authorization Id, and plan names of the active threads. This message is generated as part of the -DISPLAY THREAD command.

*System Action:* Processing continues normally.

**DSNV404I** name status act-ind req-ct corr-id auth-id pname asid token

*Explanation:* This message provides the status information on an active or inactive thread and is part of the response to the DISPLAY THREAD command. Information provided is:
name

A 1- to 8-character variable representing the 'connection name' used to establish the thread. For distributed database access threads, this field contains the following:

- For threads using system-directed access and for threads using application-directed access from a DB2 Version 3 or later requester, this variable displays the connection name of the thread at the requesting location.
- For threads using application-directed access from a non-DB2 requester or from a DB2 Version 2 Release 3 requester, this variable displays the constant SERVER.
- If the thread has a status of PT, the connection name contains blanks if the thread of the originating task is running on the same DB2. This helps to show that these parallel tasks are related to the originating task above. If the parallel task is running on a different DB2 for the originating task, then the connection name will be supplied and the entry will be followed by DSNV443I.

If the thread has a status of D, the connection name might be either the connection name for the allied address space or the DB2 subsystem name.

status

A 1- or 2- character connection status code with the following values:

D  The thread is in the process of termination as a result of the termination of the associated allied task. If this thread is also the last (or only) DB2 thread for the address space, the associated allied task is placed in a wait state.

DA The database access thread slot is currently not associated with a remote connection and is available to be assigned to a type 2 inactive thread.

DI The thread is disconnected from an execution unit. There is no TCB associated with the DB2 thread. This state is only valid when 'connection name'='RRSAF'.

N  The thread is in either IDENTIFY or SIGNON status.

PT A parallel task thread was established (plan allocated).

QD The thread is queued for termination as a result of the termination of the associated allied task. If this thread is also the last (or only) DB2 thread for the address space, the associated allied task is placed in a wait state.

QT The CREATE THREAD request was queued. The associated allied task is placed in a wait state.

R2 A distributed thread is performing a remote access on behalf of a request from another location. The thread is currently a type 2 inactive thread and is waiting for an agent to become available to process.

RA The distributed thread is performing a remote access on behalf of a request from another location.

RD A distributed thread is performing a remote access on behalf of a request from another location. The thread is performing an operation that invoked DCE services. This status is displayed until DCE returns control to DB2.

RN A distributed thread is performing a remote access on behalf of a request from another location. The request actually accesses data at yet another (DB2) location, so the thread was suspended because DB2 must first connect to the partner location (establish DB2 system conversations with the partner).

When another DB2 site is being contacted for the first time using system-directed access, DB2 must establish DB2 system conversations with the partner location. A request is presented to a DB2 DDF service task that establishes a system conversation. The thread is suspended until the request is processed. If the thread remains in this status for an extended period of time, the DB2 service task that establishes the system conversations might be busy processing other requests. The DB2 DISPLAY LOCATION command ('DISPLAY LOCATION(*) DETAIL') shows you conversation activity for this DB2 system conversation (SYSCON-O) service task.

RQ A distributed thread is performing a remote access on behalf of a request from another location. The thread is suspended because the maximum number of active database access threads (as described by the MAX REMOTE ACTIVE value of the DSN6SYSP macro in the DB2 startup param-
An asterisk if the thread is active within DB2; blank otherwise.

A wraparound counter to show the number of DB2 requests.

A 1- to 12-character variable representing the recovery 'correlation-id' associated with the thread.

For distributed database access threads, this field contains the following:

- While the thread is being created:
  - '028.DBA nn' - Where nn ranges from 01 to 99. This indicates that the DBAA is in its connection processing, which consists of establishing the DBAA thread, and validating and verifying the user's ID. Refer to the "Controlling Access to a DB2 Subsystem" chapter in Section 3 (Volume 1) of DB2 Administration Guide for descriptions of the authorization checks that might be performed.
  - RACF requests are serialized on one of the DB2 RACF service tasks, which might increase the validation time when multiple DBAAs are being created concurrently.

- After the thread is created:
  - For threads using system-directed access and threads using application-directed access from a DB2 requester, this variable displays the correlation-id name of the thread at the requesting location.
  - For threads using application-directed access from a non-DB2 requester, this variable displays the first twelve characters in the DDM external name (EXTNAM) parameter of the DDM EXCSAT command received as part of the SQL CONNECT.

- For threads using application-directed access from a non-DB2 requester or from a DB2 Version 2 Release 3 requester, this field displays the constant DISTSERV.
  - For RRSAF connected threads that did not specify a plan name at connect time, the value 'RRSAF' is displayed. If a thread was not established, this field is blank.

If you receive a system plan in this field, see the information about system plans in message DSNT376I.
Manager Services attachment facility con-
name, the CICS connection name, 
ator name is either the IMS connection 

coordinator The name of the two-phase commit coordi-
nade for a Postponed Abort UR.

Explanation: 

System Programmer Response: If you have active threads 
with QD or D status codes, use the information in message 
DSN32011 to diagnose a possible DB2 problem.

DSNV405I  DISPLAY ACTIVE REPORT COMPLETE

Explanation: This message follows messages DSNV402I 
through DSNV404I augmented by the series of messages 
DSNV444I through DSNV448I when LOCATION and/or 
DETAIL keywords are used to show distributed activity. It indi-
cates that the -DISPLAY THREAD TYPE(ACTIVE) report has 
completed successfully.

The message number and subsystem recognition character are 
not included in this message.

System Action: Processing continues normally.

DSNV406I  INDOUBT THREADS-

Explanation: This message precedes the listing of indoubt 
threads.

The series of messages DSNV406I through DSNV409I, 
DSNV446I, DSNV449I through DSNV453I, DSNV457I through 
DSNV464I, DSNV466I, DSNV467I provides the formatted 
report for the -DISPLAY THREAD TYPE(INDOUBT) command 
when the status of indoubt threads is requested.

System Action: Processing continues normally.

DSNV407I  COORDINATOR STATUS RESET URID 

Explanation: This message displays the column headings 
for the list of threads generated by the DISPLAY THREAD 
TYPE(INDOUBT) command, or for the list of Postponed Abort 
URs generated by the DISPLAY THREAD 
TYPE(POSTPONED) or DISPLAY THREAD TYPE(*) 
command.

The message number and the subsystem recognition character 
are not included in this message.

System Action: Processing continues normally.

DSNV408I  COORDINATOR STATUS RESET URID 

Explanation: This message lists status information on an 
indoubt thread or for a Postponed Abort UR.

coordinator 
The name of the two-phase commit coordi-
nator.

• If the thread is an allied thread, the coordi-
nator name is either the IMS connection 
name, the CICS connection name, 
OS/390 RRS (for Recoverable Resource 
Manager Services attachment facility con-
nected threads) or the location name of 

The message number and subsystem recognition character are 
not included in this message.

System Action: Processing continues normally.

The status of the thread.

A status of ABORTED is not displayed unless DB2 believes a participant using PN protocols 
might be indoubt. If the status of a thread for a logical unit of work at a participant is 
INDOUBT, COMMITTED-H, or ABORTED-H, 
and the coordinator is a DB2 location that has 
not cold started, then the lack of any informa-
tion about the thread in a DISPLAY THREAD(INDOUBT) report indicates that the 
decision at the coordinator was to abort the logical unit of work. In all other cases, a 
DSNV408I message for the thread is dis-
played.

• INDOUBT: The thread is indoubt and con-
tinues to appear in the display until all 
indoubt resolution responsibilities are com-
plete. Additional detail lines that might 
appear in the report are:

  – DSNV450I and DSNV446I: The 
names of downstream participants 
who might be indoubt.

  – DSNV452I or DSNV453I: A heuristic 
action was taken at a downstream 
participant. DSNV452I or DSNV453I 
continues to appear in the display until 
DB2 resolves the indoubt status with 
the coordinator. If the coordinator 
decision is the same as the heuristic 
decision of the partner, then the detail 
line is no longer displayed. If the coordi-
nator status is COMMITTED and the 
heuristic decision of the participant is 
ABORTED, then the message con-
tinues to appear in the display until it 
is deleted with the RESET INDOUBT
All database locks were released. The database administrators at all involved locations need to know that heuristic damage occurred and at which location.

- DSNV466I: For a database access thread participant, the elapsed time that the thread was indoubt.

- DSNV461I is displayed if resolution with the coordinator completed and heuristic damage was detected after the coordinator committed the logical unit of work. This line continues to appear in the display until it is deleted with the RESET INDOUBT command.

- DSNV461I is displayed if resolution with the coordinator completed and heuristic damage was detected after the coordinator committed the logical unit of work. This line continues to appear in the display until it is deleted with the RESET INDOUBT command.

- DSNV461I is displayed if resolution with the coordinator completed and heuristic damage was detected after the coordinator committed the logical unit of work. This line continues to appear in the display until it is deleted with the RESET INDOUBT command.

- ABORTED: This is a coordinator status and DB2 has one or more downstream participants using the Presumed Nothing (PN) protocol that might be indoubt. The thread appears in the display until all downstream PN participants complete indoubt resolution. Detail lines DSNV450I and DSNV446I list the downstream participants that have pending resolution. Database locks held for the thread were released.

- ABORT-PSTRT: This line represents a Postponed Abort UR. Objects for which this UR has backout work pending are inaccessible (Restart Pending) until the abort is completed (for example, by means of the -RECOVER POSTPONED command).

- ABORT-PSTRT: This line represents a Postponed Abort UR that is currently undergoing -RECOVER POSTPONED processing or automatic DB2 backout processing (requested by restarting with system parameter LBACKOUT = AUTO).

Additional detail lines might appear in an indoubt thread report, as follows:

- Cold Start: When a coordinator cold starts, indoubt participants cannot achieve automatic resolution. A DB2 participant includes message DSNV463I in the display, indicating coordinator cold start and requesting heuristic resolution. Message DSNV458I is included in the display if the coordinator cold started. This message contains information that can be used to identify the thread. This information is provided by the coordinator. A DB2 coordinator provides the connection-name used to establish the thread at the DB2 coordinator and the correlation-id used by that connection.

When a participant completes the indoubt thread decision. Additional detail lines that might appear in the report are:

- DSNV451I is displayed if resolution with the coordinator completed and heuristic damage was detected after the coordinator committed the logical unit of work. This line continues to appear in the display until it is deleted with the RESET INDOUBT command.

- DSNV461I is displayed if resolution with the coordinator completed and heuristic damage was detected after the coordinator committed the logical unit of work. This line continues to appear in the display until it is deleted with the RESET INDOUBT command.

- DSNV461I is displayed if resolution with the coordinator completed and heuristic damage was detected after the coordinator committed the logical unit of work. This line continues to appear in the display until it is deleted with the RESET INDOUBT command.

- DSNV461I is displayed if resolution with the coordinator completed and heuristic damage was detected after the coordinator committed the logical unit of work. This line continues to appear in the display until it is deleted with the RESET INDOUBT command.

- DSNV461I is displayed if resolution with the coordinator completed and heuristic damage was detected after the coordinator committed the logical unit of work. This line continues to appear in the display until it is deleted with the RESET INDOUBT command.

- DSNV461I is displayed if resolution with the coordinator completed and heuristic damage was detected after the coordinator committed the logical unit of work. This line continues to appear in the display until it is deleted with the RESET INDOUBT command.

- DSNV461I is displayed if resolution with the coordinator completed and heuristic damage was detected after the coordinator committed the logical unit of work. This line continues to appear in the display until it is deleted with the RESET INDOUBT command.
message DSNV462I indicating participant cold start. The thread continues to be displayed in the report, even after resolution with all other indoubt participants, if any. The RESET INDOUBT command must be used to purge this thread from the report. The reason for this is that the cold starting participant might have been coordinating downstream participants that are now indoubt. The database administrator at these participants might need to know the status of the thread at the coordinator so correct heuristic decisions can be made.

- Protocol Errors: A communications protocol error might occur during sync point processing and during indoubt resolution processing. These protocol errors are permanent and prevent completion of the automatic indoubt resolution process.

An indoubt display thread report shows these protocol errors, as follows:

- A DB2 coordinator detecting a sync point protocol error by a participant, such that the coordinator believes that the participant might be indoubt, adds this thread to the indoubt thread display, if the decision is to commit. Message DSNV460I is included in the display indicating the protocol error and the potential need for heuristic action at the participant. The thread continues to be included in the report until the entry is purged with the RESET INDOUBT command. If the participant is actually indoubt, the database administrator at the participant needs to know the status of the thread so that the correct heuristic decision can be made.

- A DB2 participant detecting a sync point protocol error by a coordinator when the participant is indoubt adds this thread to the indoubt thread display. Message DSNV459I is included in the display, indicating the protocol error and requesting heuristic resolution. The thread continues to be included in the report until the entry is purged with the RESET INDOUBT command. The DBA at the participant might need to contact the coordinator to determine the status of the thread.

- If a DB2 coordinator detects an indoubt resolution protocol error by a participant, message DSNV457I is included in the indoubt report, indicating the error and requesting heuristic action at the participant. The thread continues to be included in the report until the entry is purged with the RESET INDOUBT command. The database administrator at the participant needs to know the status of the thread so that the correct heuristic decision can be made.

- If a DB2 participant detects an indoubt resolution protocol error by a coordinator, and the thread status is INDOUBT, message DSNV464I is included in the indoubt report, indicating the error and requesting heuristic action. The thread continues to be included in the report until the thread is resolved with the RECOVER INDOUBT command.

**System Action:** Processing continues.

### DSNV409I  DISPLAY INDOUBT REPORT COMPLETE

**Explanation:** This message follows messages DSNV406I through DSNV408I and indicates that the -DISPLAY THREAD TYPE(INDOUBT) report was generated successfully.

The message number and subsystem recognition character are not included in this message.

**System Action:** Processing continues normally.

### DSNV410I  NO CONNECTION FOUND FOR NAME=connection-name

**Explanation:** The -DISPLAY THREAD TYPE(ACTIVE) or TYPE(INACTIVE) command was unable to find any connection associated with ‘connection-name’. This message is generated once for each requested connection name that was not found.

**System Action:** Command processing continues.

### DSNV411I  NO THREADS FOUND FOR NAME=connection-name

**Explanation:** The -DISPLAY THREAD TYPE(ACTIVE) or TYPE(INACTIVE) command was unable to locate any threads associated with ‘connection-name’. This message is generated once for each connection name for which no threads were found.

**System Action:** Command processing continues.

### DSNV412I  csect-name NO INDOUBT THREADS FOUND FOR NAME=connection name

**Explanation:** In this message, ‘csect-name’ is the name of the command program CSECT that issued the message. ‘NAME’ is the connection name specified on the command. The named command was unable to locate any indoubt threads associated with the ‘connection name’. This message is generated once for each ‘connection name’ for which no threads were found.

**System Action:** Command processing continues.
DSNV413I  csect-name verbname pkwname TERMINATED, DEFAULT UNAVAILABLE

Explanation: This message indicates that the command 'verbname' abnormally terminated because the command was entered from an MVS console and a required parameter was not supplied with the command.

csect-name The name of the command program CSECT that issued the message.

verbname The command verb as entered by the requester. The error depends on which command was entered.
  • DISPLAY THREAD - neither the ‘connection-name’, LOCATION, nor LUWID was specified.
  • RECOVER INDOUBT - neither ‘connection-name’ nor LUWID was specified.

pkwname The command primary keyword as entered by the requester.

System Action: Command processing terminates.

Operator Response: Reenter the command specifying one of the required parameters.

DSNV414I  THREAD xxx COMMIT SCHEDULED

Explanation: In this message, ‘xxx’ is the recovery identifier specified with the -RECOVER INDOUBT command to identify the indoubt thread and is one of the following:

ID= The recovery correlation-id specified with the command.
NID= The recovery network-id specified with the command.
LUWID = Luwid=token indicates the luwid and token that identify the thread specified with the command.

System Action: The thread specified on the -RECOVER INDOUBT command is scheduled for COMMIT recovery action.

DSNV415I  THREAD xxx ABORT SCHEDULED

Explanation: In this message, ‘xxx’ is the recovery identifier specified with the -RECOVER INDOUBT command to identify the indoubt thread and is one of the following:

ID= The recovery correlation-id specified with the command.
NID= The recovery network-id specified with the command.
LUWID = Luwid=token indicates the luwid and token that identify the thread specified with the command.

The thread specified on the -RECOVER INDOUBT command is scheduled for ABORT recovery action.

System Action: Command processing continues.

DSNV416I  THREAD NID=net-node.number IS INVALID

Explanation: In this message, ‘net-node’ is the recovery ‘network-id’ specified with the command. The -RECOVER INDOUBT command (NID=net-node.number) determined that the input format for the specified network-id is invalid.

System Action: Command processing continues.

Operator Response: Prior to reentering the command, ensure that the network-id entered is in the correct format as specified on the -RECOVER INDOUBT command.

DSNV417I  THREAD xxx NOT FOUND

Explanation: In this message, ‘xxx’ is the recovery identifier specified with the -RECOVER INDOUBT command to identify the indoubt thread and is one of the following:

ID= The recovery correlation-id specified with the command
NID= The recovery network-id specified with the command
LUWID = The luwid or token specified with the command

The -RECOVER INDOUBT command was unable to locate the specified thread to be scheduled for recovery. Either the thread identifier is incorrect, or the thread no longer is in an indoubt state.

System Action: Command processing continues.

Operator Response: Before reentering the command, ensure that the thread still is in an indoubt state.

DSNV418I  RECOVER INDOUBT REJECTED FOR ID= correlation-id

Explanation: In this message, ‘ID=’ indicates the recovery ‘correlation-id’ specified with the command. The -RECOVER INDOUBT command determined that more than one ‘network-id’ is associated with the specified ‘correlation-id’. No recovery action is taken against the indoubt threads associated with the ‘correlation-id’.

System Action: Command processing continues.

Operator Response: To indicate the specific indoubt thread to be scheduled for resolution, the ‘network-id’ associated with the thread must be specified.

DSNV419I  NO CONNECTIONS FOUND

Explanation: The -DISPLAY THREAD command found no active or inactive connections within the system. This message is generated when the command requests thread information for all (TYPE=*), active (TYPE=ACTIVE), or inactive (TYPE=INACTIVE) connections within the system, but no active or inactive connections currently exist.

System Action: Command processing continues.
DSNV420I  NO INDOUBT THREADS FOUND
Explanation: The -DISPLAY THREAD command found no indoubt threads within the system. This message is generated when the command requests information about all (*) threads currently residing within an indoubt state (TYPE=INDOUBT) within the system, but no threads currently exist within this state.
System Action: Command processing continues.

DSNV421I  DISPLAY TERMINATED WITH MAX LINES
Explanation: This message indicates the -DISPLAY THREAD TYPE(ACTIVE) or the DISPLAY THREAD TYPE(INACTIVE) report was truncated. The report was generated in response to a command from an MVS console and more than 254 response messages were generated. Only 254 response messages are returned.
The message number and subsystem recognition character are not included in this message.
System Action: The truncated report is written to the MVS console.
Operator Response: Reissue the -DISPLAY THREAD request specifying a specific connection name, location, luwid, or a combination of these, as appropriate, to further reduce the display.

DSNV422I  DISPLAY INDOUBT TERMINATED WITH MAX LINES
Explanation: This message indicates the -DISPLAY THREAD TYPE(INDOUBT) report was truncated. The report was generated in response to a command from an MVS console and more than 254 response messages were generated. Only 254 response messages are returned.
The message number and subsystem recognition character are not included in this message.
System Action: The truncated report is written to the MVS console.
Operator Response: Reissue the -DISPLAY THREAD request specifying a specific connection name.

DSNV423I  DISPLAY THREAD MESSAGE POOL SIZE EXCEEDED
Explanation: The virtual storage requirement needed to generate a -DISPLAY THREAD response display exceeded the maximum size of the message buffer pool.
System Action: Processing is terminated.
User Response: Reissue the -DISPLAY THREAD request specifying TYPE(INDOUBT), TYPE(ACTIVE), or TYPE(INACTIVE) and a specific connection name, location, luwid, or a combination of these, as appropriate, to further reduce the display.
Operator Response: Refer to the User Response.

DSNV424I  INACTIVE THREADS-
Explanation: This message precedes the listing of inactive threads.
The series of messages DSNV402I through DSNV405I provide the formatted report for the -DISPLAY THREAD TYPE(INACTIVE) when the status of inactive threads is requested.
The series of messages DSNV444I through DSNV448I augment the formatted report for the -DISPLAY THREAD TYPE(INACTIVE) when LOCATION, LUWID, or DETAIL keywords are used to show idle distributed threads.
System Action: Processing continues normally.

DSNV425I  DISPLAY INACTIVE REPORT COMPLETE
Explanation: This message follows messages DSNV424I, DSNV403I and DSNV404I, which are augmented by the series of messages DSNV444I through DSNV448I when LOCATION and/or DETAIL keywords are used to show idle distributed threads. It indicates that the -DISPLAY THREAD TYPE(INACTIVE) report completed successfully.
The message number and subsystem recognition character are not included in this message.
System Action: Processing continues normally.

DSNV426I  csect-name THREAD token HAS BEEN CANCELED
Explanation: This message is issued in response to the CANCEL THREAD command. The thread is scheduled for termination.
System Action: The specified thread is scheduled for termination. The termination of the thread does not occur unless processing is occurring within DB2.

DSNV427I  csect-name INVALID THREAD token SPECIFIED
Explanation: This message is issued in response to the CANCEL THREAD command. No thread with the specified token was found.
System Action: The specified thread is not canceled.
User Response: Determine the correct token of the thread you want to cancel and reissue the command. You can use the -DISPLAY THREAD command to display all thread activity.

DSNV428I  csect-name THREAD token WAS PREVIOUSLY CANCELED
Explanation: The thread with the specified token was previously canceled by either the CANCEL THREAD or CANCEL DDF THREAD command, or is already in the process of termination.
The CANCEL command terminates the thread only if the thread is processing in DB2 or is currently suspended by DB2. The thread might not be processing in DB2 in these situations:

- The thread is processing in the application and has not made a request to DB2. The DISPLAY THREAD command indicates this.

- The user placed the thread on an MVS resource using the ENQUE command. The CANCEL command has no effect on the thread until ENQUE completes and the thread returns to DB2.
• The thread is processing in VTAM and is waiting for a response from a partner. The DISPLAY THREAD DETAIL command indicates this. The thread does not terminate until VTAM returns to DB2. VTAM commands, which will terminate the session or LU, can be used to cause VTAM to return to DB2.

**DSNV429I**  
**V429 CALLING PROCEDURE=proc, LOAD MODULE=loadmod, PROC=jclproc, ASID=asid, WLM_ENV=wlmenv**  
**Explanation:** This message appears in the output of the DISPLAY THREAD command when a thread is running a stored procedure.

- **proc** The name of the stored procedure the SQL application is running.
- **loadmod** The MVS load module associated with the stored procedure. This field will contain blanks until the load module name has been determined.
- **jclproc** The name of the JCL PROC used to start the address space where the stored procedure is running. This field will contain blanks until the stored procedure has been assigned to a specific stored procedure address space.
- **asid** The MVS ASID of the address space where the stored procedure is running. This field will contain 0000 until the stored procedure has been assigned to a specific stored procedure address space.
- **wlmenv** The name of the WLM application environment where the stored procedure is running. If it is running in the DB2-established stored procedure address space, this field will contain blanks.

**System Action:** The DISPLAY THREAD command continues processing.

**DSNV431I**  
**POSTPONED ABORT THREADS**  
**Explanation:** This message precedes the listing of Postponed Abort URs.

The series of messages DSNV431I, DSNV407I, DSNV408I and DSNV432I provide the formatted report for the -DISPLAY THREAD TYPE(POSTPONED) command. The series also provides a section of the formatted report for -DISPLAY THREAD TYPE(*) report.

**System Action:** Processing continues successfully.

**DSNV432I**  
**DISPLAY POSTPONED ABORT REPORT COMPLETE**  
**Explanation:** This message follows messages DSNV431I and DSNV408I and indicates that the -DISPLAY THREAD TYPE(POSTPONED) report was completed successfully, or that the section of the -DISPLAY THREAD TYPE(*) report for Postponed Abort URs has been completed successfully.

**System Action:** Command processing continues.

**DSNV433I**  
**NO POSTPONED ABORT THREADS FOUND FOR NAME = connection name**  
**Explanation:** The -DISPLAY THREAD command found no postponed abort URs for the named connection. This message is generated when the command requests information about threads for the given connection name currently residing within a postponed abort state, but none currently exist within this state.

**System Action:** Command processing continues.

**DSNV434I**  
**sect-name NO POSTPONED ABORT THREADS FOUND**  
**Explanation:** This message is issued by the RECOVER POSTPONED command, automatic online backout processing (invoked by restarting with system parameter LBACKOUT=AUTO), and also by the DISPLAY THREAD TYPE(POSTPONED) command. It indicates that no postponed abort threads were found to process. The 'sect-name' is the name of the command program CSECT that issued the message.

**System Action:** The command (or auto-resolution processing) completes normally.

**DSNV435I**  
**RESOLUTION OF POSTPONED ABORT URS HAS BEEN SCHEDULED**  
**Explanation:** This message is issued by the RECOVER POSTPONED command, and also by automatic online backout processing (invoked by restarting with system parameter LBACKOUT=AUTO). It indicates that postponed abort URs exist and their backout processing will proceed asynchronously.

**System Action:** The command (or auto-resolution processing) completes normally.

**DSNV436I**  
**PGM=collection.package, SEC=section, STMNT=statement**  
**Explanation:** This message appears in the output of a DISPLAY THREAD report when a detail display is specified. If DB2 is currently processing an SQL statement, this message identifies the program which contains that statement and displays the SQL statement being executed.

- **collection** The collection ID associated with package. If the SQL statement being executed is associated with a DBRM that was directly bound as part of the plan, and is not associated with a package, then collection is not applicable and is indicated by an asterisk (*).
- **package** The package or DBRM member.
- **section** The SQL section number associated with the package or DBRM.
- **statement** The SQL statement number associated with the package or DBRM.

The message number and subsystem recognition character are not included in this message. However, V436 is included in the message text to identify the message.

**System Action:** Command processing continues.

**DSNV437I**  
**V437-WORKSTATION=wsname, USERID=user-id, APPLICATION NAME =appl-name**  
**Explanation:** This message appears in the output of a DISPLAY THREAD report when a non-detail display is specified. If the appropriate information is provided by the client system, this message is issued and identifies more specific information regarding the identity of the end-user associated with this thread.
DSNV443I • DSNV447I

<table>
<thead>
<tr>
<th>wname</th>
<th>The client end-user workstation name.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>If not provided by the client system, this field contains an asterisk.</td>
</tr>
<tr>
<td>user-id</td>
<td>The client end-user user-id.</td>
</tr>
<tr>
<td></td>
<td>If not provided by the client system, this field contains an asterisk.</td>
</tr>
<tr>
<td>appl-name</td>
<td>The client end-user application name.</td>
</tr>
<tr>
<td></td>
<td>If not provided by the client system, this field contains an asterisk.</td>
</tr>
<tr>
<td>statement</td>
<td>The SQL statement number associated with the package or DBRM.</td>
</tr>
</tbody>
</table>

This message number and subsystem recognition character are not included in this message. However, V437 is included in the message text to identify the message.

**System Action:** Command processing continues.

---

**DSNV443I** V443-PARALLELISM  
**COORDINATOR**=member-name, **ORIGINATING TOKEN**=token

**Explanation:** This message follows a DSNV404I message for each parallel task thread that is running on an assisting DB2. This message gives the DB2 member name and the originating task’s thread token.

<table>
<thead>
<tr>
<th>member-name</th>
<th>The coordinating DB2 member where the originating task thread is running.</th>
</tr>
</thead>
<tbody>
<tr>
<td>token</td>
<td>The originating task thread token.</td>
</tr>
</tbody>
</table>

The message number and subsystem recognition character are not included in this message. However, V443 is included in the message text to identify the message.

**System Action:** Command processing continues.

---

**DSNV444I** V444-luwid=token ACCESSING DATA AT.

**Explanation:** This message follows a DSNV404I message for each thread that was distributed to other locations when a nondetail display is specified. This message gives the logical-unit-of-work identifier for the distributed thread, followed by an equal sign (=) and a token, which can be used in place of luw-id in any DB2 command that accepts luw-id as input. Message DSNV446I follows with the names of the locations associated with this 'luw-id'.

| luwid=token | The global logical unit of work id and the local token that identifies the thread. If the thread becomes indoubt, a new token is assigned for the indoubt thread. |

The message number and subsystem recognition character are not included in this message. However, V444 is included in the message text to identify the message.

**System Action:** Command processing continues.

---

**DSNV445I** V445-luwid=token ACCESSING DATA FOR location

**Explanation:** This message follows a DSNV404I message for a database access thread. This message displays the logical-unit-of-work identifier assigned to the database access thread.

**System Action:** Command processing continues.

---

**DSNV446I** V446--location-i location-j ...

**Explanation:** This message is a continuation of message DSNV444I or message DSNV450I and provides a list of 'location-i'.

| location-i | Identifies the name of a remote DBMS at which data is being accessed or where a thread is indoubt. |

The **location-i** string includes two or three tokens delimited by a colon (" :").

- The first token is the partner location name.
- The second token is the partner LU name for an SNA connection, or the dotted decimal IP address for a TCP/IP connection (nnn.nnn.nnn.nnn).
- The third token only appears if the second token is an IP address in which case the third token is a port number.

When the message appears after message DSNV450I, the port number represents a resync port number. Otherwise the message appears after a DSNV444I message in which case it represents an SQL port number.

A 'location-i' identifier is repeated for each DBMS where data is being accessed or where a thread is indoubt.

The message number and subsystem recognition character are not included in this message. However, V445 is included in the message text to identify the message.

**System Action:** Command processing continues.

---

**DSNV447I** V447--LOCATION SESSID A ST TIME

**Explanation:** This message forms the heading for the listing of distributed active or inactive threads in message DSNV448I. Items in this part of the heading are:

- **LOCATION** Heading for the associated location names
- **SESSID** Heading for the associated VTAM-defined session identifiers
A Heading for the associated active indicators
ST Heading for the associated status indicators
TIME Heading for the associated time stamps

See message DSNV448I for descriptions of these items.

The message number and subsystem recognition character are not included in this message. However, V447 is included in the message text to identify the message.

System Action: Processing continues normally.

DSNV448I V448--location sessid active status time

Explanation: This message follows the DSNV447I message for a database access thread or distributed allied thread when a detail display is specified. This message is displayed for each conversation connected to the thread. It lists detailed information about the conversations associated with the thread.

location
If displaying an allied thread, the location is the name of the server; otherwise, it is the name of the requester. The name can be any of the following: the relational database name of the partner, the VTAM LU name of the partner (<luname>), or the dotted decimal IP address of the partner (nnn.nnn.nnn.nnn).

sessid
There are two possible values for this field:

- For VTAM partners, this field contains the VTAM-defined session instance identifier of the session on which the conversation is executing. Zeros if the session identifier is not applicable.
- VTAM does not supply the entire session id to DB2. The first two digits of the session id are incorrect. Therefore, the session id as presented in this message is not acceptable in VTAM commands. The VTAM DISPLAY NET,ID=db2-luname,SCOPE=ACT command must be used to obtain the full session ID. The DISPLAY NET command lists all sessions (SID) for the DB2 logical unit. Scan the DISPLAY NET output for the complete SID.

- For TCP/IP connections, this field contains the local DB2 TCP/IP port number, followed by the partner's TCP/IP port number. The two port numbers are separated by a colon (e.g. 5001:28191).

active
One of the following:

V The conversation is active within VTAM or TCP/IP.

W The conversation is suspended in DB2 waiting for VTAM or TCP/IP notification that the function is complete.

Blank, otherwise.

status
Status of the conversation.

This information is presented as two characters, each of which has significance.

First Character

A Conversation in allocation.
C Session limits are being negotiated with the partner (CNOS) prior to conversation allocation.
D Conversation in deallocation.
R Receiving
  - At the requesting site, this indicates that the conversation is receiving a response from a request.
  - At the server site, this indicates that the conversation is receiving or waiting for a request.

S Sending
  - At the requesting site, this indicates that the conversation can send requests to the server.
  - At the server site, this indicates that the conversation is sending or preparing to send a response.

X Exchanging log name information with the partner before conversation allocation to determine if the partner supports protected conversations. If the thread remains in this status for an extended period of time, the DB2 service task that exchanges log names might be busy processing other requests. The DB2 DISPLAY LOCATION command ('DISPLAY LOCATION(*) DETAIL') shows you conversation activity for this (RESYNC) service task.

Blank, otherwise.

Second Character

1 Unprotected conversation using system-directed access is active.
2 Unprotected conversation using application-directed access is active.
3 Protected conversation using system-directed access is active.
4 Protected conversation using application-directed access is active.
Blank otherwise.

time
The time stamp (yydddhhmmssth) of the last message sent or received on the conversation.

The message number and subsystem recognition character are not included in this message. However, V448 is included in the message text to identify the message.

System Action: Command processing continues normally.

DSNV449I V449-HAS NID=nid AND ID=correlation-id

Explanation: This message is a detail line, which might be displayed with a DISPLAY THREAD TYPE (INDOUBT) report.

nid The network-id assigned by IMS or CICS or, if the connection type is RRSASF, the OS/390 RRS unit of recovery ID (URID)
correlation-id

The correlation-id assigned by IMS or CICS or if the connection type is RRSAF, the correlation-id assigned by the connected application.

The message number and subsystem recognition character are not included in this message. However, V449 is included in the message text to identify the message.

**System Action:** Processing continues normally.

**Explanation:** This message is a detail line which might be displayed with a DISPLAY THREAD TYPE (INDOUBT) report. This message is followed by one or more DSNV446I messages that name the ‘locations’ where indoubt participant threads are located. The ‘luwid’ of the indoubt thread is displayed in the previous DSNV408I message.

The message number and subsystem recognition character are not included in this message. However, V450 is included in the message text to identify the message.

**System Action:** The thread remains indoubt and processing continues normally.

**Operator Response:** See message DSNL406I for more information. The indoubt participants displayed can also result from an abnormal termination of this DB2 subsystem.

**Explanation:** This message is a detail line which might be displayed with a DISPLAY THREAD TYPE (INDOUBT) report. When an indoubt thread is manually resolved with the coordinator, this message is included in the report if indoubt resolution with the coordinator was not complete. The ‘coordinator’ and the ‘luwid’ of the indoubt thread are displayed in the previous DSNV408I message.

The message number and subsystem recognition character are not included in this message. However, V451 is included in the message text to identify the message.

**System Action:** The thread remains indoubt and processing continues normally.

**Operator Response:** See message DSNL406I for more information.

**Explanation:** This message is a detail line which might be displayed with a DISPLAY THREAD TYPE (INDOUBT) report. A decision was made at the participant to force an indoubt thread to abort without waiting for automatic resynchronization to be performed. The ‘luwid’ of the thread that was forced to abort is displayed in the preceding DSNV408I message.

The message number and subsystem recognition character are not included in this message. However, V453 is included in the message text to identify the message.

**System Action:** Processing continues normally.

**Operator Response:** See message DSNL403E for more information.

**Explanation:** The -DISPLAY THREAD TYPE(ACTIVE) command was issued with the keyword LOCATION or LUWID and it was found that the distributed data facility (DDF) was not started. The LOCATION or LUWID keyword can be used only if DDF is in operation.

**System Action:** Command processing is complete.

**Operator Response:** The syntax of the DISPLAY THREAD and RECOVER INDOUBT commands is described in DB2 Command Reference. Reenter the command specifying valid LUWID values.

**Explanation:** This message is a detail line which might be displayed with a DISPLAY THREAD TYPE (INDOUBT) report. During attempted automatic indoubt resolution with the participant, a protocol error was detected. The ‘luwid’ of the thread that might require manual resolution at the participant is displayed in the preceding DSNV408I message.

The message number and subsystem recognition character are not included in this message. However, V457 is included in the message text to identify the message.
System Action: Processing continues normally.

Operator Response: See message DSNL414E for more information.

---

**DSNV458I**  V458-CONNECTION-NAME  connection-name

**CORRELATION-ID**  correlation-id

**Explanation:** This message is a detail line which might be displayed with a DISPLAY THREAD TYPE (INDOUBT) report. It is displayed only if message DSNV463I is also displayed.

*connection-name* The connection-name assigned by the coordinator if the coordinator is another DB2 system. The constant SERVER if the coordinator is not a DB2 system.

*correlation-id* The correlation-id assigned by the coordinator if the coordinator is another DB2 system. The first 12 characters of the EXNAME parameter of the EXCSAT command sent by the coordinator if the coordinator is not a DB2 system.

The message number and subsystem recognition character are not included in this message. However, V458 is included in the message text to identify the message.

System Action: Processing continues normally.

Operator Response: See message DSNV463I for more information.

---

**DSNV459I**  V459-SYNCPPOINT PROTOCOL ERROR WITH COORDINATOR

**Explanation:** This message is a detail line which might be displayed with a DISPLAY THREAD TYPE (INDOUBT) report. Manual resolution of an indoubt thread at this location is required. A protocol error was detected during sync point processing with the participant. The 'coordinator' and the 'luwid' of the thread that requires manual resolution are both displayed in the preceding DSNV408I message.

The message number and subsystem recognition character are not included in this message. However, V459 is included in the message text to identify the message.

System Action: Processing continues normally.

Operator Response: See message DSNV412I for more information.

---

**DSNV460I**  V460-SYNCPPOINT PROTOCOL ERROR WITH PARTICIPANT  location

**Explanation:** This message is a detail line which might be displayed with a DISPLAY THREAD TYPE (INDOUBT) report. Manual resolution of an indoubt thread at the participant location might be required. A protocol error was detected during sync point processing with the participant. The 'luwid' of the thread that requires manual resolution at the participant is displayed in the preceding DSNV408I message.

The message number and subsystem recognition character are not included in this message. However, V460 is included in the message text to identify the message.

System Action: Processing continues normally.

Operator Response: See message DSNL420E for more information.

---

**DSNV461I**  V461-RESYNC WITH COORDINATOR SHOWS HEURISTIC DAMAGE

**Explanation:** This message is a detail line which might be displayed with a DISPLAY THREAD TYPE (INDOUBT) report. Indoubt resolution with the coordinator completed. Heuristic damage was detected at this location because the heuristic decision made at this location is different than the decision made at the coordinator. The 'coordinator' and the 'luwid' of the thread are displayed in the previous DSNV408I message. The 'status' field in the previous DSNV408I message shows the heuristic decision made at this location. This message continues to appear until it is deleted with a RESET INDOUBT command.

The message number and subsystem recognition character are not included in this message. However, V461 is included in the message text to identify the message.

System Action: The thread remains indoubt and processing continues normally.

Operator Response: See message DSNL400E and DSNL401E for more information.

---

**DSNV462I**  V462-COLD START BY PARTICIPANT AT LOCATION location

**Explanation:** This message is a detail line which might be displayed with a DISPLAY THREAD TYPE (INDOUBT) report. There was an indoubt thread at the participant whose 'luwid' is displayed in the preceding DSNV408I message. DB2 has coordinator responsibility for the indoubt thread and the participant informed DB2 that it performed a cold start operation and lost all knowledge of indoubt threads. There might be heuristic damage at the participant. The RESET INDOUBT command must be used to purge this message from the indoubt report. The reason for this is that the cold-starting participant might have been coordinating downstream participants that are now indoubt. The database administrator at these participants might need to know the status of the thread at the coordinator, so that correct heuristic decisions can be made.

*location* The 'location' where the cold start was performed. The 'location' is either the relational database name (location-name), the logical unit name (<luname>), or the dotted decimal IP address (nnn.nnn.nnn.nnn) of the participant.

The message number and subsystem recognition character are not included in this message. However, V462 is included in the message text to identify the message.

System Action: Processing continues normally.

Operator Response: See message DSNL420E for more information.

---

**DSNV463I**  V463-COORDINATOR HAS COLD STARTED

**Explanation:** This message is a detail line which might be displayed with a DISPLAY THREAD TYPE (INDOUBT) report. Manual resolution of an indoubt thread at this location is required. The coordinator for a thread that is indoubt at DB2 was cold started and therefore lost all knowledge of indoubt threads. The 'coordinator' and the 'luwid' of the thread for which manual resolution is required are displayed in the preceding DSNV408I message.

System Action: Processing continues normally.
This message is a detail line which might be displayed with a DISPLAY THREAD TYPE (INDOUBT) report. The thread entered the indoubt state at the specified time. This means that DB2 is the participant in the logical unit of work and completed the first phase of commit and is waiting for the commit or abort decision to be transmitted from the coordinator. However, DB2 lost communications with the coordinator. The thread is identified in the preceding DSNV408I message.

hh:mm:ss The length of time the thread was indoubt (expressed in hours, minutes and seconds). The maximum number of hours reported is 65535, which is roughly 7.5 years. After this time period elapses, the count is reset to zero.

The following actions might be taken to resolve this thread by manual means (that is, take heuristic action) if it is necessary to release locks held by this thread.

- Determine the proper decision (commit or abort) by contacting the coordinator 'location' shown in the display of indoubt threads.
- Use the RECOVER INDOUBT command to heuristically commit or abort the thread.

The message number and subsystem recognition character are not included in this message. However, V466 is included in the message text to identify the message.

System Action: Processing continues normally.

Operator Response: See message DSNL411I for more information.

System Action: Processing continues normally.

Operator Response: See message DSNL404E for more information.

System Action: Processing continues normally.

System Action: Command processing continues.
DSNV473I  ACTIVE THREADS FOUND FOR MEMBER: memname

Explanation: This message precedes the listing of active threads found on another member of a data sharing group as the result of the SCOPE(GROUP) keyword.

Message DSNV473I and the series of messages DSNV403I through DSNV405I provide the formatted report for the -DISPLAY THREAD TYPE(ACTIVE) SCOPE(GROUP) when the status of active threads is requested.

The series of messages DSNV444I through DSNV448I augment the formatted report for the -DISPLAY THREAD TYPE(ACTIVE) SCOPE(GROUP) when LOCATION, LUWID, or DETAIL keywords are used to show distributed activity.

memname Member name for which thread information is being displayed.

System Action: Processing continues normally.

DSNV474I  INDOUBT THREADS FOUND FOR MEMBER: memname

Explanation: This message precedes the listing of indoubt threads found on member memname as the result of the SCOPE(GROUP) keyword.

Messages DSNV474I, DSNV403I, DSNV404I and DSNV409I provide the formatted report for the -DISPLAY THREAD TYPE(INDOUBT) SCOPE(GROUP) when the status of indoubt threads is requested.

memname Member name for which thread information is being displayed.

System Action: Processing continues normally.

DSNV475I  INACTIVE THREADS FOUND FOR MEMBER: memname

Explanation: This message precedes the listing of inactive threads found on member memname as the result of the SCOPE(GROUP) keyword.

Messages DSNV475I, DSNV403I, DSNV404I and DSNV425I provide the formatted report for the -DISPLAY THREAD TYPE(INACTIVE) SCOPE(GROUP) when the status of inactive threads is requested.

The series of messages DSNV444I through DSNV448I augment the formatted report for the -DISPLAY THREAD TYPE(INACTIVE) SCOPE(GROUP) when LOCATION, LUWID, or DETAIL keywords are used to show idle distributed threads.

memname Member name for which thread information is being displayed.

System Action: Processing continues normally.

DSNV476I  POSTPONED ABORT THREADS FOUND FOR MEMBER: memname

Explanation: This message precedes the listing of Postponed Abort units of recovery found on another member of a data sharing group as the result of the SCOPE(GROUP) keyword.

Messages DSNV476I, DSNV403I, DSNV404I and DSNV432I provide the formatted report for the -DISPLAY THREAD TYPE(POSTPONED) SCOPE(GROUP) command.

memname Member name for which thread information is being displayed.

System Action: Processing continues normally.

DSNV478I  SCOPE(GROUP) DISPLAY TERMINATED DUE TO IRLM TRUNCATION

Explanation: This message displays as a result of the -DISPLAY THREAD command when the SCOPE(GROUP) keyword is specified and IRLM has truncated the responses gathered from other members. This is a DB2 internal error.

System Action: The -DISPLAY THREAD report is terminated and processing abnormally terminates.

Operator Response: Notify the system programmer.

System Programmer Response: Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: This is an internal error.

DSNV479I  SCOPE(GROUP) DATA UNAVAILABLE IRLM RETURN CODE: retcode
IRLM REASON DATA: reason

Explanation: This message displays as a result of the -DISPLAY THREAD command when the SCOPE(GROUP) keyword is specified and the IRLM NOTIFY to other members has returned a bad return code.

retcode Return code from IRLM on the Notify request.

reason Reason code diagnostic information from IRLM on the Notify request.
# DSNW... Messages

<table>
<thead>
<tr>
<th>DSNW001I</th>
<th>ASYNCHRONOUSLY GATHERED DATA IS BEING FormATTENDED IN THIS DUMP</th>
</tr>
</thead>
</table>
| **Explanation:** The subsystem formatting exit is not using DB2 summary dump records for formatting. The formatted control blocks may not contain the same values as they did at the time of the error.  
**System Action:** Dump formatting continues.  
**System Programmer Response:** If you want DB2 summary dump records to be used, do not specify the ‘SUMDUMP=NO’ operand on the dump control statement. |
| DSNW002I | SUMMARY DUMP RECORDS ARE BEING FOR- mATTENDED IN THIS DUMP |
| **Explanation:** The subsystem formatting exit is using DB2 summary dump record information to format its control blocks.  
**System Action:** Dump formatting continues.  
**System Programmer Response:** If you do not want DB2 summary dump records to be used in formatting, specify the ‘SUMDUMP=NO’ and ‘SUBSYS=subsystem name’ on the dump control statement. Both operands are required. |
| DSNW004I | ONE OR MORE INVALID OPERANDS WERE FOUND ON THE DSNWDMPC CONTROL CARD, SUBSYSTEM FORMATTING TERMINATED |
| **Explanation:** An invalid operand was found on the dump control statement. The operand was not ‘SG’, ‘LG’, ‘SA’, ‘AA’, or ‘ALL’.  
**System Action:** Control returns to AMCPREDMP or IPCS to terminate the exit.  
**System Programmer Response:** Correct the dump control statement operand specified by message DSNW007I. |
| DSNW005I | DUMP FORMATTER WORK BUFFER (DSNWDBUF) CANNOT BE LOCATED |
| **Explanation:** The subsystem formatting exit could not locate its work buffer.  
**System Action:** Control returns to AMCPREDMP or IPCS to terminate the exit.  
**System Programmer Response:** Increase the region size. |
| DSNW006I | THE ERLY BLOCK CANNOT BE ACCESSED OR IT IS INVALID |
| **Explanation:** The subsystem formatting exit could not locate its anchor block.  
**System Action:** Control returns to AMCPREDMP or IPCS to terminate the exit.  
**System Programmer Response:** Specify ‘SUBSYS=subsystem name’, ‘SUMDUMP=NO’ on the dump control statement. The subsystem name should have between 1 and 4 characters. |
| DSNW007I | THE FOLLOWING OPERAND SPECIFIED ON THE DSNWDMPC CONTROL CARD IS INVALID: xxxx |
| **Explanation:** The specified operand was not one of the valid dump control statement operands.  
**System Action:** Control returns to AMCPREDMP or IPCS to terminate the exit.  
**System Programmer Response:** Check the dump control statement operands. |
| DSNW008I | THE SCOM CANNOT BE ACCESSED OR IT IS INVALID |
| **Explanation:** An error was encountered while trying to retrieve the SCOM.  
**System Action:** Control returns to AMCPREDMP or IPCS to terminate the exit.  
**System Programmer Response:** If ‘SUMDUMP=NO’ was specified on the dump control statement, omit this operand, and resubmit the job. Otherwise, specify this operand on the dump control statement, and resubmit the job. |
| DSNW009I | THE ADDRESS SPACE REQUESTED IS NOT AVAILABLE |
| **Explanation:** The DB2 control blocks for the address space specified on the ‘SA=asid’ dump operand could not be located.  
**System Action:** Formatting continues if other dump operands were specified.  
**System Programmer Response:** Check the ASID specified on the ‘SA=’ dump operand. The ASID must be specified in hexadecimal. |
| DSNW010I | THE TRACE RMFT CANNOT BE ACCESSED OR IT IS INVALID |
| **Explanation:** The DB2 trace table could not be located.  
**System Action:** Formatting of the DB2 trace table is bypassed, and formatting continues of any other requested dump segment.  
**System Programmer Response:** If ‘SUMDUMP=NO’ was specified on the dump control statement, omit this operand. Otherwise, specify this operand on the dump control statement. In either case, resubmit the job. |
| DSNW011I | A LARGER REGION SIZE IS REQUIRED FOR THIS JOB |
| **Explanation:** The subsystem formatting exit could not obtain a large enough work buffer to process the summary dump records.  
**System Action:** Subsystem formatting continues.  
**System Programmer Response:** Rerun the job, specifying a larger region size in the JCL. |
DSNW013I DMPW NOT FOUND IN SUMMARY DUMP

Explanation: The subsystem formatting exit was unable to locate the DMPW control block in the summary record portion of the dump data set. Because the DMPW provides the main anchor block for the dump formatter, processing is terminated.

System Action: Control returns to AMDPRDMP or IPCS to terminate the exit.

System Programmer Response: If this is not a DB2 dump data set, specify 'SUBSYS=xxxx,SUMDUMP=YES' on the dump control statement (where xxxx is the 1- to 4-character subsystem name), so that the subsystem formatting exit does not attempt to use summary dump data.

DSNW014I REQUIRED SUMMARY DUMP RECORDS ARE NOT IN THIS DUMP. WILL ATTEMPT TO FORMAT FROM NON- SUMMARY DUMP

Explanation: Expected data could not be found in the summary dump. This message is issued for information only. Dump formatting continues. However, it will take longer, because a greater volume of data COMMAND PQUIT must be analyzed.

System Action: Formatting is attempted using the full dump instead of the summary dump.

System Programmer Response: Though processing continues, this message is an indication of a problem, and should be pursued as such.

DSNW015I SSCVT NOT LOCATED. CHECK THE SUBSYSTEM NAME ON THE CONTROL CARD

Explanation: In a search through the SSCVT chain, a match of the subsystem name in the SSCVTs and the subsystem name on the control statement was not found.

System Action: Formatting for the named subsystem is not done.

Operator Response: Check the 'SUBSYS=' operand on the control statement.

System Programmer Response: Correctly specify the subsystem name on the control statement.

DSNW016I THE RMVT CANNOT BE ACCESSED OR IT IS INVALID

Explanation: The subsystem formatting exit could not locate the RMVT. The RMVT is required for formatting the DB2 trace table and a number of other DB2 control blocks.

System Action: Formatting of the DB2 trace table is bypassed, and formatting of other requested dump segments continues.

System Programmer Response: If 'SUMDUMP=NO' was specified on the dump control statement, omit this operand. Otherwise, try specifying this operand on the dump control statement. In either case, resubmit the job.

DSNW017I MAXIMUM STACK LEVEL EXCEEDED

Explanation: This condition is usually caused by the DB2 control block formatter looping. The stack array is depleted and can no longer accommodate control blocks.

System Action: Dump formatting is terminated.

System Programmer Response: Examine the control block chains to see if they are looping. If those chains are not looping, increase the dimension of the stack array.

DSNW018I SUBSYS= NOT SPECIFIED ON THE CONTROL CARD OR MISSING. REQUIRED IF SUMDUMP=NO SPECIFIED

Explanation: The 'SUMDUMP=NO' option was specified, but either the 'SUBSYS=' operand is missing, or it was incorrectly specified.

System Action: Dump formatting is terminated.

Operator Response: Run the dump printing job after the error has been corrected.

DSNW020I UNSUCCESSFUL SEARCH FOR THE ERLY CONTROL BLOCK

Explanation: The 'ERLY' control block could not be located in the dump.

System Action: Dump formatting is terminated.

Operator Response: Check that the 'SUBSYS=' operand was correctly specified, and rerun the job.

System Programmer Response: This message can mean that the 'ERLY' control block has been overlaid. Examine the full dump to determine whether the subsystem is present. If it is, you may be able to determine why the control block could not be located.

DSNW022I THE RESIDENT TRACE WAS NOT ACTIVE AT THE TIME OF DUMP

Explanation: Trace table formatting has been attempted, but no trace table existed at the time of the dump.

System Action: Dump formatting continues with any other control blocks that were to be formatted.

DSNW023I THE TRACE TABLE ENTRY IS OUT OF SEQUENCE OR OVERLAID

Explanation: A trace entry is overlaid by another trace entry of a different timestamp. This message is issued to flag an unrecognized trace entry. This can occur when the oldest entry in the table is the second half of a double entry.

System Action: Formatting of the trace table continues.

DSNW024I TRACE TABLE

Explanation: The trace table follows.

System Action: Trace table formatting follows.
DSNW025I DUMP ACCESS ERROR ACCESSING THE TRACE TABLE IN THE DUMP
Explanation: A nonzero return code was returned from the storage access routine when accessing the trace table.
System Action: Trace table formatting is bypassed.
System Programmer Response: Check the address and ASID of the trace table.

DSNW026I CONTROL BLOCK SUMMARY (ALL ADDRESS SPACES)
DSNW027I CONTROL BLOCK SUMMARY (SINGLE ADDRESS SPACE)
DSNW028I CONTROL BLOCK SUMMARY (LONG FORM GLOBAL)
DSNW029I CONTROL BLOCK SUMMARY (SHORT FORM GLOBAL)
Explanation: Messages DSNW026I through DSNW029I provide descriptive information regarding the type of formatting being produced.
System Action: Dump formatting continues.

DSNW030I DUMP ACCESS ERROR ACCESSING THE CONTROL BLOCK STRUCTURE TABLE IN THE DUMP
Explanation: The control block structure table cannot be accessed from the dump.
System Action: Control block formatting is terminated.
Operator Response: Notify the system programmer.
System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

DSNW031I DUMP ACCESS ERROR ACCESSING ANCHOR CONTROL BLOCK
Explanation: The anchor control block cannot be accessed from the dump.
System Action: Control block formatting is terminated.
Operator Response: Notify the system programmer.
System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

DSNW032I BEGINNING FORMATTING
Explanation: Formatting of DB2 control blocks is beginning.

DSNW033I TRACE TABLE AND GLOBAL BLOCKS ALREADY DUMPED
Explanation: An indicative dump is being requested. The DB2 trace table and the global blocks have already been dumped with first dump (full dump) for this abend dump (SNAP) invocation. These are, therefore, not dumped in the dump for this task.

DSNW034I WARNING – NO TASK RELATED CONTROL BLOCKS FOR THIS TASK
Explanation: The TCB for which the dump is being requested is not IDENTIFIED to DB2. Task-related control blocks are not dumped. The DB2 trace table and global blocks are dumped only if the ‘SYSABEND’ DD statement is present and only if this is the first of the dump(s) (full dump) for this abend dump (SNAP) invocation.
System Action: No DB2 formatting is done for the specified task.

DSNW035I CONTROL BLOCKS FOR TASKS ASSOCIATED WITH THE ABOVE RECOVERY COORDINATOR TASK
Explanation: The formatted blocks following this message are associated with TCBs that have IDENTIFIED to DB2 with the ‘recovery coordinator = no’ option. These TCBs may not have invoked SNAP, but they are associated with the TCB that did.
System Action: Related control blocks are dumped.
System Programmer Response: Examine the control blocks for relevant information.

DSNW036I TASK RELATED CONTROL BLOCKS FOR THIS TASK
Explanation: The formatted blocks following this message are associated with the TCB that is being dumped.
System Action: Relevant control blocks are dumped.
System Programmer Response: Examine the control blocks for relevant information.

DSNW037I END OF FORMATTING
Explanation: Formatting of DB2 control blocks is completed.

DSNW038I SUBSYSTEM FORMATTING COMPLETE FOR THIS DUMP
Explanation: The subsystem formatting routine has completed its processing for this dump data set.

DSNW039I ‘VVV’ CONTROL BLOCK FORMATTER ERROR FLAGS
- X’80’: FIELD EXPECTED TO BE ZERO IS NONZERO
- X’40’: LAST BLOCK IN CHAIN DOES NOT POINT BACK TO PARENT BLOCK
- X’20’: BLOCK NOT FOUND IN DUMP
- X’10’: BLOCK LENGTH INCORRECT
- X’08’: VERIFICATION CODE INCORRECT
- X’04’: BLOCK CHAINED FROM THIS BLOCK NOT FOUND IN DUMP
- X’02’: BLOCK CHAINED FROM THIS BLOCK HAS WRONG VERIFICATION CODE
- X’01’: VALIDATION CONSTANT DOES NOT MATCH EXPECTED VALUE
Explanation: The message DSNW040I appears at the beginning of a formatted dump. It defines the hexadecimal values associated with the ‘VVV=XX’ keyword. This keyword is pro-
vioned on the title line of each control block selected for formatting. It indicates any unusual conditions encountered during the validation and format processing of the current control block structure.

System Action: Dump formatting continues.

System Programmer Response: All nonzero ‘XX’ values should be examined. If an error is indicated, the printout of the dump should be used for the problem documentation.

Problem Determination: Possible errors include:

- X’80’
- X’40’
- X’20’
- X’04’

The current state of the individual control block structures at the time of error might vary with the type of error involved. Examine control block structures with one of these ‘XX’ values based on the specific ABEND code.

Example: A X’04’ associated with the referencing control block and the X’20’ associated with the referenced control block may mean the ABEND occurred between the release of the referenced control block and re-initialization of the address within the referencing one.

DB2 validation errors include:

- X’10’
- X’08’
- X’02’
- X’01’

These values indicate that a validation error occurred while formatting the associated control block.

For example, an X’08’ associated with the referenced control block indicates the storage area has been overlaid or the address in the referencing control block is incorrect. Subsequent examination of the values in this control block is not reliable.

----

**DSNW041I THE TAB CANNOT BE ACCESSED OR IT IS INVALID**

Explanation: The DB2 trace table anchor block could not be located.

System Action: Formatting of the DB2 trace table is bypassed, and formatting of any other requested dump segment continues.

System Programmer Response: If ‘SUMDUMP=NO’ was specified on the dump control statement, omit this operand. Otherwise, specify this operand on the dump control statement. In either case, resubmit the job.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 2, 5.

----

**DSNW049I OLDEST SLOT ADDRESS INVALID, FORMATTING TRACE TABLE FROM FIRST ENTRY**

Explanation: The next trace table entry location is invalid.

System Action: Dump formatting continues.

System Programmer Response: The printout of the dump should be used for the problem documentation.

Problem Determination: The Trace Anchor Block has been initialized incorrectly, or overlaid during execution.

----

**DSNW050I ssid, NO SDWA/LOGREC,**

**ABND=comp-reason, U=user-id,**

**M=module, C=XYR00, vrm=comp-function**

Explanation: This message provides the default SVC dump title (SDUMP) associated with the SYS1.DUMP data set when an SDWA was unavailable during recovery processing. The variable fields are:

- **ssid**
  4-character DB2 subsystem name

- **comp-reason**
  Abend completion code, followed by the abend reason code.

- **user-id**
  Authorization-ID for the individual subsystem user.

- **module**
  Functional recovery routine responsible for the dump.

- **vrm=comp-function**
  Component-ID, as follows:

  - **vrm**
    DB2 version, release number, and modification level.

  - **comp-function**
    Component-ID function.

System Action: Dump processing continues.

System Programmer Response: Since the SDWA provides important diagnostic information to assist in problem determination, examine the recovery environment at time of error to determine why an SDWA was not provided for this abend.

In a nonrecovery environment, there may be valid reasons for the lack of an SDWA.

Problem Determination: In a recovery environment, functional recovery routines (FRRs) are guaranteed an SDWA by Recovery Termination Manager (RTM). Therefore, the recovery routine is most likely an ESTAE recovery routine. The primary reason for an SDWA not being provided to an ESTAE routine is insufficient storage available during recovery processing. Examine the region sizes allocated to the failing function to ensure that sufficient storage is available.

In a nonrecovery environment, no SDWA is provided because only RTM can create one.

----

**DSNW051I ERROR DURING DUMP PROCESSING**

Explanation: This message is generated by the ‘SDUMP dump data gathering service’ recovery routine when an error is encountered during dump processing.

System Programmer Response: This error is documented in a SYS1.LOGREC record. This message can be issued because of an error in the invocation of SDUMP, or because of an error in SDUMP itself, or during control block examination and access.
System Action: Processing of the 'SUMLSTA' user storage areas is terminated, an SVC dump is requested, and control is returned to RTM.

DSNW052I ERROR ENcountered DURING LOAD OR VALIDATION OF A CONTROL BLOCK STRUCTURE TABLE MODULE

Explanation: The DB2 dump formatting facility cannot be used to format control blocks. An error occurred during the DB2 startup process while attempting to LOAD one of the Control Block Structures Table (CBDS) modules from the DB2 subsystem program library.

System Action: Subsystem startup processing continues.

Operator Response: If intervention is desired, notify the system programmer.

System Programmer Response: If intervention is desired, the DB2 subsystem can be terminated by either an MVS CANCEL command or a -STOP DB2 command. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The modules must reside in a DB2 program library named on the execution procedure used to start a DB2 subsystem address space.

The named modules prohibit the use of the DB2 dump formatting facility to format SVC dumps that occur during the current execution cycle of the DB2 subsystem. The named modules are not required for DB2 execution.

DSNW053I VRA DIAGNOSTIC INFORMATION REPORT

Explanation: All DB2 diagnostic information in the Variable Recording Area (VRA) at the time of the error is extracted and displayed in this report.

The address of the SDWA, the contents of SDWARA, and SDWARA's hexadecimal offset into SDWA are also displayed. Individual diagnostic entries are identified by a hexadecimal VRA 'key', followed by the length of the subsequent data. Data fields are displayed in hexadecimal and EBCDIC formats. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

System Action: Dump format processing continues.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

DSNW054I NO VRA DATA RECORDED IN SDWA

Explanation: The SDWA obtained from the SYS1.DUMP data set contained no diagnostic information in the VRA.

System Action: VRA report generation is bypassed, dump format processing continues.

System Programmer Response: If an error is indicated, the printout of the dump should be used for the problem documentation. If VRA data is needed, the abending DB2 subcomponent has failed to supply it. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

DSNW055I FORMAT ROUTINE UNABLE TO LOCATE SDWA

Explanation: The MVS Summary Dump Data Access Service Routine (IEAVTFRD) was unable to locate the SDWA in the summary data portion of the SYS1.DUMP data set.

System Action: VRA report generation is terminated and dump format processing continues.

System Programmer Response: Take the appropriate action, as indicated in the next section. If an error is indicated, use the printout of the dump for problem documentation.

Problem Determination: The SDWA is placed in the summary data portion of the SYS1.DUMP data set by AMDPRDMP or IPCS. It indicates either CSA or Local Storage Residency.

If the SDWA is not in the dump data set, no error is indicated.

DSNW056I VRA DIAGNOSTIC REPORT COMPLETE

Explanation: The VRA Diagnostic Report is done.

System Action: Dump format processing continues.

DSNW060I BEGIN SAVE AREA TRACE

Explanation: This message identifies the start of the DB2 register Save Area Trace report which appears in the formatted section of a DB2 SVC Dump. The save areas for the current failing agent execution block (EB), and all associated Agent EEs, are traced from the point of error and displayed in order of invocation.

The format of this report is as follows:

Save Area Identification

The address and contents of each save area is displayed and identified by the invoking module.

Module-name Service-level-identifier

SA .... WD1 .... HSA .... LSA ....
RET .... EPA .... R0 ....
R1 .... R2 .... R3 ....
R4 .... R5 .... R6 ....
R7 .... R8 .... R9 ....
R10 .... R11 .... R12 ....

Module-name identifies the module responsible for obtaining the save area as indicated in the DB2 module entry point list (MEPL) at the time of the error.

If the MEPL does not contain an entry that corresponds to the module entry point address (EPA), this field is set to:

MODULE INFORMATION UNAVAILABLE

Service-level-identifier

The service level information associated with the module name is obtained from the corresponding module MEPL entry, and consists of the compilation-date and the PTF number of the latest maintenance applied.

If no maintenance has been applied for this module, this field defaults to the Function Modification Identifier (FMID).
SA identifies the address and contents of each word of the save area and is displayed using the format and register abbreviation conventions defined by MVS SNAP. All save area data references indicate the primary address space at the time of execution.

Execution Environment
Displays the current execution environment at the time of error for the save areas that follow. This information is repeated each time the current Agent execution EB changed during processing.

CURRENT EB=address JOBNAME=name
HASID=hasid PASID=pasid
EXECUTION MODE=mode

address Address of the associated Agent EB.
name The 8-character MVS jobname associated with the home address space.
hasid Home address space identifier.
pasid Primary address space identifier.
mode Agent EB MVS execution mode:
    TCB Task Control Mode
    SRB Supervisory Request Mode

Register Save Area Contents for Agent EBs
The contents of the register save area chains for the current failing Agent EB, and all suspended Agent EBs at the time of error, are displayed using the save area (SA) format.

REGISTERS IN (CB-name) AT TIME OF execution-status

CB-name Identifies the name of the control block from which the registers for the current Agent EB were obtained:
    SDWA MVS System Diagnostic Workarea (Failure).
    TCB MVS Task Control Block (Suspend).
    STSV MVS SRB Status Save Area (Suspend).

execution-status Indicates the current execution status of the Agent EB at the time of error:
    Failure Failing execution EB.
    Suspend Suspended execution EB.

Change of Primary Address Space
Since all register data references refer to the primary address space associated with the currently active execution EB, the following information is displayed each time the primary address changed during execution:

CHANGE OF ADDRESS SPACE, NEW PASID=pasid

pasid Indicates the new primary address space identifier associated with the save areas that follow.

System Action: save area trace format processing continues for the failing agent EB, and all associated agent EBs.
System Programmer Response: See the Problem Determination section.

Problem Determination: This report may be used to determine the register contents, module invocation sequence, and execution environments leading up to the point of error.

Register Save Area Contents for Agent EBs
The contents of the register save area chains for the current failing Agent EB, and all suspended Agent EBs at the time of error, are displayed using the save area (SA) format.

REGISTERS IN (CB-name) AT TIME OF execution-status

CB-name Identifies the name of the control block from which the registers for the current Agent EB were obtained:
    SDWA MVS System Diagnostic Workarea (Failure).
    TCB MVS Task Control Block (Suspend).
    STSV MVS SRB Status Save Area (Suspend).

execution-status Indicates the current execution status of the Agent EB at the time of error:
    Failure Failing execution EB.
    Suspend Suspended execution EB.

Change of Primary Address Space
Since all register data references refer to the primary address space associated with the currently active execution EB, the following information is displayed each time the primary address changed during execution:

CHANGE OF ADDRESS SPACE, NEW PASID=pasid

pasid Indicates the new primary address space identifier associated with the save areas that follow.

System Action: save area trace format processing continues for the failing agent EB, and all associated agent EBs.
System Programmer Response: See the Problem Determination section.

Problem Determination: This report may be used to determine the register contents, module invocation sequence, and execution environments leading up to the point of error.

Register Save Area Contents for Agent EBs
The contents of the register save area chains for the current failing Agent EB, and all suspended Agent EBs at the time of error, are displayed using the save area (SA) format.

REGISTERS IN (CB-name) AT TIME OF execution-status

CB-name Identifies the name of the control block from which the registers for the current Agent EB were obtained:
    SDWA MVS System Diagnostic Workarea (Failure).
    TCB MVS Task Control Block (Suspend).
    STSV MVS SRB Status Save Area (Suspend).

execution-status Indicates the current execution status of the Agent EB at the time of error:
    Failure Failing execution EB.
    Suspend Suspended execution EB.

Change of Primary Address Space
Since all register data references refer to the primary address space associated with the currently active execution EB, the following information is displayed each time the primary address changed during execution:

CHANGE OF ADDRESS SPACE, NEW PASID=pasid

pasid Indicates the new primary address space identifier associated with the save areas that follow.

System Action: save area trace format processing continues for the failing agent EB, and all associated agent EBs.
System Programmer Response: See the Problem Determination section.

Problem Determination: This report may be used to determine the register contents, module invocation sequence, and execution environments leading up to the point of error.

Register Save Area Contents for Agent EBs
The contents of the register save area chains for the current failing Agent EB, and all suspended Agent EBs at the time of error, are displayed using the save area (SA) format.

REGISTERS IN (CB-name) AT TIME OF execution-status

CB-name Identifies the name of the control block from which the registers for the current Agent EB were obtained:
    SDWA MVS System Diagnostic Workarea (Failure).
    TCB MVS Task Control Block (Suspend).
    STSV MVS SRB Status Save Area (Suspend).

execution-status Indicates the current execution status of the Agent EB at the time of error:
    Failure Failing execution EB.
    Suspend Suspended execution EB.

Change of Primary Address Space
Since all register data references refer to the primary address space associated with the currently active execution EB, the following information is displayed each time the primary address changed during execution:

CHANGE OF ADDRESS SPACE, NEW PASID=pasid

pasid Indicates the new primary address space identifier associated with the save areas that follow.

System Action: save area trace format processing continues for the failing agent EB, and all associated agent EBs.
System Programmer Response: See the Problem Determination section.

Problem Determination: This report may be used to determine the register contents, module invocation sequence, and execution environments leading up to the point of error.

Register Save Area Contents for Agent EBs
The contents of the register save area chains for the current failing Agent EB, and all suspended Agent EBs at the time of error, are displayed using the save area (SA) format.

REGISTERS IN (CB-name) AT TIME OF execution-status

CB-name Identifies the name of the control block from which the registers for the current Agent EB were obtained:
    SDWA MVS System Diagnostic Workarea (Failure).
    TCB MVS Task Control Block (Suspend).
    STSV MVS SRB Status Save Area (Suspend).

execution-status Indicates the current execution status of the Agent EB at the time of error:
    Failure Failing execution EB.
    Suspend Suspended execution EB.

Change of Primary Address Space
Since all register data references refer to the primary address space associated with the currently active execution EB, the following information is displayed each time the primary address changed during execution:

CHANGE OF ADDRESS SPACE, NEW PASID=pasid

pasid Indicates the new primary address space identifier associated with the save areas that follow.

System Action: save area trace format processing continues for the failing agent EB, and all associated agent EBs.
System Programmer Response: See the Problem Determination section.

Problem Determination: This report may be used to determine the register contents, module invocation sequence, and execution environments leading up to the point of error.
Problem Determination: During MVS/RTM recovery processing, IFC Dump Services attempts to include all control blocks (both DB2 and MVS), and the pertinent DB2 save areas in the dump data set, regardless of the type of error. Control blocks and save areas associated with the following address spaces at time of error will be included in the dump data set:
- Primary, Secondary, and Home address spaces.
- DB2 System Services and Database Services address spaces.

DSNW108I UNABLE TO AUTOMATICALLY START type TRACE

Explanation: System parameters indicated that a DB2 trace should be started automatically during DB2 subsystem initialization, but the DB2 subsystem was unable to start the trace. A nonzero return code was received from the -START TRACE command.

System Action: Subsystem initialization continues.

Operator Response: Start the trace via the -START TRACE command after DB2 subsystem initialization is complete.

DSNW109I TRACE INITIALIZATION PARAMETERS UNAVAILABLE, DEFAULTS ASSUMED

Explanation: The trace function was unable to access the trace initialization parameters defined by the DSN6SYSYP macro. Default values as defined by that macro are assumed for trace parameters.

System Action: Subsystem initialization continues.

Operator Response: Determine if the system parameters module DSNZPARM is missing or inaccessible. If not, determine if the CSECT DSN6SYSYP is missing. Trace can be started with the -START TRACE command.

DSNW120I A SPECIFIED keyword VALUE IS INVALID FOR type TRACE

Explanation: A trace command has been entered, but a specified keyword value is not valid for the trace type requested.

System Action: Processing for the TRACE command is terminated.

Operator Response: If a -START TRACE command was entered, specify a valid destination for the trace. Otherwise, issue a -DISPLAY TRACE command to determine what traces are currently active. Refer to DB2 Command Reference for details about valid classes.

Problem Determination: Obtain a copy of the system or terminal log to verify command entry.

DSNW121I A SPECIFIED CLASS VALUE IS INVALID FOR type TRACE

Explanation: A trace command has been entered, but a specified class value is not valid for the trace type requested.

System Action: Processing for the TRACE command is terminated.

Operator Response: If a -START TRACE command was entered, specify a valid class for the trace. Otherwise, issue a -DISPLAY TRACE command to determine what options are currently active. Refer to DB2 Command Reference for details about valid classes.

Problem Determination: Obtain a copy of the system or terminal log to verify command entry.

DSNW122I THE KEYWORD keyword IS NOT VALID FOR type TRACE

Explanation: A trace command has been entered, but ‘keyword’ is not valid for the trace type specified.

System Action: Processing for the TRACE command is terminated.

Operator Response: Either the named keyword must be omitted from the command, or a different type of trace must be specified. Refer to DB2 Command Reference for details about valid combinations of keywords and trace types.

Problem Determination: Obtain a copy of the system or terminal log to verify command entry.

DSNW123I csect-name TRACE RECORDING HAS BEEN RESUMED ON dest

Explanation: ‘dest’ destination resumes acceptance of trace data after a failure.

System Action: Data recording is resumed.

DSNW124I csect-name type TRACE TERMINATED

Explanation: During processing ‘type’ trace, processing abended due to an error. A trace type of blank indicates all tracing has stopped. ‘RMID’, displayed in decimal, identifies the resource manager. ‘RC’, displayed in hexadecimal, specifies the return/reason/abend code associated with the action.

Further collection of the named trace is stopped. If it is necessary to resume collection of the trace, a -START TRACE command may be issued. However if another failure is experienced, the problem should be resolved before starting the trace collection again.

System Action: Processing for the named trace type is stopped. The message is not externalized by the functional recovery routine, but is outputted whenever a IFC event is driven at a later time. A trace type of blank indicates all tracing has stopped.

User Response: Investigate the reasons for the failure.

Operator Response: If necessary to collect the named trace, issue a -START TRACE command to resume processing.

Problem Determination: Obtain a copy of the system or terminal log. If a dump was produced, have it printed. Print a copy of the contents of the SYS1.LOGREC for the time period involved. Forward these items along with a copy of the system log to the system programmer.

DSNW125I MULTIPLE ENTRIES NOT ALLOWED FOR keyword AND keyword

Explanation: The following matrix shows keywords which can have multiple entries and the valid combinations. If the row keyword has multiple values then the column keyword can have multiple (M) entries or a maximum of one (1).

Certain keywords are not allowed with some commands. Refer to DB2 Command Reference for additional information.
This message is issued by the following CSECT: DSNWVCM1

Explanation: This message is issued for -DISPLAY TRACE responses. The message indicates the trace number that is active, the type of trace, the class within type, and the destination specified for the active trace entries. Whether the trace is qualified is also displayed. If QUAL=YES, the trace is qualified by authorization ID, plan, RMID, or location. If QUAL=NO, the trace is not qualified. Qualification information may be requested by specifying DETAIL(2) on -DISPLAY TRACE. Refer to messages DSNW143I, DSNW144I, and DSNW145I for more information about -DISPLAY TRACE. The message number is not displayed to save space on the message line.

System Action: Processing for the TRACE command is terminated.

Operator Response: Reenter the command omitting the invalid keyword.

Problem Determination: Obtain a copy of the system or terminal log to verify command entry.

DSNW126I  \textit{type} TRACE NOT ALLOWED, ACTITIVE TRACE TABLE FULL

Explanation: The 'type' trace cannot be started because the active trace table is has reached the maximum number of active traces allowed.

This message is issued by the following CSECT: DSNWVCM1

System Action: Processing for the TRACE command is terminated.

Operator Response: Use the -DISPLAY TRACE command to see if an active trace could be stopped. An active trace must be stopped before any other start trace command will be processed.

Problem Determination: Obtain a copy of the system or terminal log to verify command entry.

DSNW127I  CURRENT TRACE ACTIVITY IS-

Explanation: This message is the title for the -DISPLAY TRACE command output. The DSNW127I message is followed by the DSNW128I message, one or more DSNW129I messages, and the DSNW147I message.

This message is issued by the following CSECT: DSNWVCM1

DSNW128I  \textit{tno} type class dest qual

Explanation: This message is issued before any -DISPLAY TRACE responses. The message follows message DSNW127I. The title indicates the trace number that is active, the type of trace, the class within type, and the destination specified for the active trace entries. Whether the trace is qualified is also displayed. If QUAL=YES, the trace is qualified by authorization ID, plan, RMID, or location. If QUAL=NO, the trace is not qualified. Qualification information can be requested by specifying DETAIL(2) on -DISPLAY TRACE. Refer to messages DSNW143I, DSNW144I, DSNW145I, and DSNW148I for more information about -DISPLAY TRACE. The message number is not displayed to save space on the message line.

This message is issued by the following CSECT: DSNWVCM1

DSNW129I  \textit{tno} type class dest qual

Explanation: This message is issued for -DISPLAY TRACE responses. The message indicates the trace number that is active, the type of trace, the class within type, and the destination specified for the active trace entries. Whether the trace is qualified is also displayed. If QUAL=YES, the trace is qualified by authorization ID, plan, RMID, or location. If QUAL=NO, the trace is not qualified. Qualification information may be requested by specifying DETAIL(2) on -DISPLAY TRACE. Refer to messages DSNW143I, DSNW144I, and DSNW145I for more information about -DISPLAY TRACE. The message number is not displayed to save space on the message line.

The message follows message number DSNW128I or DSNW129I. If more information is available than can be displayed on one line, subsequent lines of information are displayed. The message number is not displayed to save space on the message line.

System Action: Processing for the TRACE command is terminated.

Operator Response: Reenter the command omitting the invalid keyword.

Problem Determination: Obtain a copy of the system or terminal log to verify command entry.

DSNW130I  \textit{type} TRACE STARTED ASSIGNED TRACE NUMBER \textit{tno}

Explanation: 'type' trace has been started and assigned the decimal trace number 'tno'. Multiple messages are possible when the start request specifies multiple plans or multiple authorization ids.

This message is issued by the following CSECT: DSNWVCM1

System Action: Processing for the -START TRACE command will continue.

DSNW131I  STOP TRACE SUCCESSFUL FOR TRACE NUMBER(S) \textit{tno,...}

Explanation: The trace number(s), 'tno,...', have been stopped. Up to five decimal trace numbers may be listed. If more than five traces have been stopped, then another DSNW131I message is sent.

System Action: Processing for the -STOP TRACE command will continue.

DSNW132I  MODIFY TRACE SUCCESSFUL FOR TRACE NUMBER(S) \textit{tno,...}

Explanation: The trace numbers, 'tno,...', have been modified. Up to five numbers may be listed. If more than five traces have been modified, then another DSNW131I message is sent.

System Action: Processing for the modify command will continue.

DSNW133I  csect-name TRACE DATA LOST, dest NOT ACCESSIBLE RC=\textit{code}

Explanation: The destination specified stopped accepting trace data during a trace. Some condition external to DB2 caused the data rejection. The reason for failure is defined by the return code (RC). The RC hexadecimal value can be:

- The hexadecimal return code from SMF. Refer to the appropriate MVS publication for the specific value.
- The hexadecimal return code from the GTF request.
  04 GTF trace and/or USR tracing is not active.
- The hexadecimal return code from the OPn request.
  04 No OPn buffer is assigned to an application to collect data.
- The hexadecimal return code from the OPX request.
04 No OPn buffer is assigned to an application to collect data.
08 The OPX trace destination buffer is full causing data to be lost.

• The hexadecimal return code from the SRV request.
10 The serviceability routine is absent.
xx The serviceability routine return code.

System Action: Trace processing continues although data will be lost.

This message will also be issued if a -START TRACE command is entered from the console or from the DB2 commands panel to an unassigned OPn or OPX destination. This is because the OP destination is not activated until an application program claims the buffer. DB2 will begin writing trace records to the buffer when an application program issues a -START TRACE to this same OP buffer destination.

Operator Response: Investigate the GTF or SMF facility to determine why data is not being accepted. You may want to issue a -START TRACE command to record the data at another destination. The -DISPLAY TRACE command shows what types of data were recorded at the specified destination. Message DSNW133I with RC=8 is due to exhaustion of storage in an OPx buffer.

Problem Determination: Obtain a copy of the system or terminal log to verify command. Refer to MVS/ESA System Management Facilities (SMF) for an explanation of the return code value. For instances of message DSNW133I with RC=8, consult Appendix E (Volume 2) of DB2 Administration Guide. The OPx buffer to which the records were to be written has been filled, and all subsequent records intended for the buffer will be lost until an IFI READA request is issued to read and clear the contents of the buffer. Suggested actions include increasing the size of the OPx buffer and/or issuing the IFI READA request more frequently so that the OPx buffer is read and cleared before buffer storage is exhausted.

DSNW135I type TRACE ALREADY ACTIVE, TRACE NUMBER tno
Explanation: 'type' trace was already active with trace number 'tno'.
System Action: Processing for the -START TRACE command will continue.

DSNW137I SPECIFIED TRACE NOT ACTIVE
Explanation: The specified trace could not be found in the active trace table.
System Action: Processing for the -STOP or -DISPLAY TRACE command will continue.
Operator Response: You may wish to issue an unqualified -DISPLAY TRACE command to determine all the active trace entries. If no traces are active then an unqualified -DISPLAY TRACE command response message is a DSNW137I message.

DSNW138I IFCID ifcid-number IS INVALID
Explanation: The specified IFCID number is outside the range of valid IFCID numbers or is an IFCID number which is not allowed on a trace command as specified in Section 5 (Volume 2) of DB2 Administration Guide.
System Action: Processing of the trace command is terminated before any trace functions are performed.
Operator Response: Investigate the reason for the problem.
Problem Determination: Refer to DB2 Command Reference for the range of valid IFCID numbers.

DSNW139I AUTHORIZATION FAILURE BECAUSE authorization-privilege PRIVILEGE REQUIRED
Explanation: The user of the command does not have the required authorization privilege to execute the command.
System Action: Command processing is stopped.
User Response: Notify the security administrator.
Operator Response: Notify the security administrator.
Problem Determination: Obtain a copy of the command input and verify the user’s current authorization from the DB2 subsystem catalog.

DSNW140I ALL OPN DESTINATIONS ARE ASSIGNED
Explanation: The request could not be processed because destinations OP1 - OP8 were assigned.
System Action: Processing of the trace command is terminated before any trace functions are performed.
User Response: Investigate the reason for the failure.
Operator Response: Investigate the reason for the problem by doing a display trace to analyze the active traces.
Problem Determination: Analyze why all the OPn destinations are active after doing a display trace.

DSNW141I STORAGE NOT AVAILABLE FOR BUFFER SIZE size K BYTES
Explanation: The request could not be processed because storage cannot be obtained for the OPn destination storage buffer.
System Action: Processing of the trace command is terminated.
User Response: Investigate the reason for the failure.
Operator Response: Investigate the reason for the problem by doing a display trace to analyze the active traces.
Problem Determination: The problem is caused either because one or more prior start traces to an OPn destination used all the storage in the IFC OPn storage pool or because ECSA contiguous storage was not available. The IFC OPn storage pool limit is approximately 4 megabytes. When a trace is stopped the buffer storage is not free. If another start trace is issued to the same destination, the storage will be reused. If the requested storage is greater than the current unassigned buffer, it is free and a larger buffer is obtained. If the requested storage is less than the current unassigned buffer, the buffer is reused. Fragmentation can occur if either application programs or an operator specify numerous start commands for varying size buffers.
**DSNW142I** \- **DSNW149I**

**DSNW142I**  
**SPECIFIED BUFSIZE IS INCOMPATIBLE WITH ASSIGNED BUFFER**

**Explanation:** The request could not be processed because the start trace command specified a BUFSIZE value for an OPn destination which has a buffer already assigned with a different BUFSIZE.

**System Action:** Processing of the trace command is terminated.

**User Response:** Investigate the reason for the failure.

**Operator Response:** Investigate the reason for the problem.

**Problem Determination:** The problem may be caused by one application program attempting to start a trace to a destination owned by another program. This is a site problem and can be solved by having application programs start traces to an OPX destination rather than a specific OPn destination. If only one application program is starting traces, then the program should either specify the same BUFSIZE for all requests or should not specify BUFSIZE.

---

**DSNW143I**  
**CURRENT TRACE QUALIFICATIONS ARE -**

**Explanation:** This message is issued before -DISPLAY TRACE responses when DETAIL(2) or DETAIL(\*) is specified. Message DSNW143I is followed by the DSNW144I message, one or more DSNW145I messages, and the DSNW148I message.

**DSNW144I**  
**TNO AUTHID PLAN RMID LOCATION**

**Explanation:** This message is issued before -DISPLAY TRACE responses when DETAIL(2) is specified. The title indicates the trace number that is active, the authorization ID, the plan, the RMID, and the location specified for the active trace entries. The message follows message DSNW143I. The message number is not displayed to save space on the message line.

**DSNW145I**  
**tno authid plan rmid location**

**Explanation:** This message is issued for -DISPLAY TRACE responses when DETAIL(2) is specified. The message indicates the trace number that is active, the authorization ID, the plan, the RMID, and the location specified for the active trace entries.

The message follows messages DSNW143I or DSNW144I. If more information is available than can be displayed on one line, subsequent lines of information are displayed. The message number is not displayed to save space on the message line.

**DSNW146I**  
**MULTIPLE ENTRIES NOT ALLOWED FOR keyword, keyword AND keyword**

**Explanation:** The following matrix shows keywords that can have multiple entries and the valid combinations. If the row keyword has multiple values, the column keyword can have multiple (M) entries or a maximum of one (1).

<table>
<thead>
<tr>
<th>Class</th>
<th>Dest</th>
<th>Plan</th>
<th>Authorization ID</th>
<th>RMID</th>
<th>TNO</th>
<th>Loca</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
</tr>
<tr>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
</tr>
<tr>
<td>M</td>
<td>1</td>
<td>1</td>
<td>M</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>M</td>
<td>M</td>
<td>1</td>
<td>M</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
</tr>
<tr>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
</tr>
<tr>
<td>M</td>
<td>M</td>
<td>1</td>
<td>1</td>
<td>M</td>
<td>1</td>
<td>M</td>
</tr>
<tr>
<td>M</td>
<td>M</td>
<td>1</td>
<td>M</td>
<td>M</td>
<td>1</td>
<td>M</td>
</tr>
</tbody>
</table>

Certain keywords are not allowed with some commands. Refer to DB2 Command Reference for additional information.

**System Action:** Processing for the TRACE command is terminated.

**Operator Response:** Omit the invalid keyword and reenter the command.

**Problem Determination:** Obtain a copy of the system or terminal log to verify command entry.

---

**DSNW147I**  
***END OF DISPLAY TRACE SUMMARY DATA***

**Explanation:** This message is produced when all summary information for the -DISPLAY TRACE command has been written. Summary information is written when the DETAIL keyword is specified as '1', '*', or not specified at all. Message DSNW147I follows one or more DSNW129I messages. The message number is not displayed to save space on the message line.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, "Problem determination on page 1051, 1, 2, 5.

**DSNW148I**  
***END OF DISPLAY TRACE QUALIFICATION DATA***

**Explanation:** This message is produced when all qualification data for the -DISPLAY TRACE command has been written. Qualification data is written when the DETAIL keyword of the -DISPLAY TRACE command is specified as '2', or '*'. Message DSNW148I follows one or more DSNW145I messages. The message number is not displayed to save space on the message line.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, "Problem determination on page 1051, 1, 2, 5.

**DSNW149I**  
**STOP TRACE COMMAND WAS UNSUCCESSFUL BECAUSE MONITOR TRACE CLASS 6 IS ACTIVE FOR QUALIFYING TRACE NUMBER(S) tno,...**

**Explanation:** No traces were stopped by the -STOP TRACE command. Either -STOP TRACE(*) or -STOP TRACE(MON) CLASS(*) was issued when monitor trace class 6 was active. An asterisk (*) is not allowed for the TRACE and CLASS keywords when monitor trace class 6 is active. The trace numbers, 'tno,...', indicate the traces that met any other speci-
fied -STOP TRACE qualifying criteria (PLAN, AUTHID, RMID, LOCATION, TNO) and also activated monitor trace class 6, thereby preventing all qualifying traces from being stopped. This special handling of the asterisk on the -STOP TRACE command for monitor trace class 6 reduces the possibility of accidentally stopping monitor trace class 6, which enables and disables DB2 data propagation.

**System Action:** No traces are stopped. Processing of the -STOP TRACE command is terminated.

**User Response:** Reissue the -STOP TRACE command without using an asterisk for the trace type. You can use a asterisk for the CLASS keyword to stop all trace types except the monitor (MON) trace.

**Operator Response:** If you do not want DB2 data propagation capability, you can stop monitor trace class 6 to allow full use of the asterisk. First stop the traces indicated by the trace numbers, 'tno,...', and then reissue the command.

If you want DB2 data propagation capability, do not stop monitor trace class 6. You must specify the trace TYPE. You can stop traces without specifying the trace CLASS as long as the trace TYPE is not (MON). If the trace TYPE is (MON), then you must specify the CLASS keyword explicitly (for example, -STOP TRACE(MON) CLASS(1,2)).

Refer to [DB2 Command Reference](https://www.ibm.com/) for information on restrictions to the -STOP TRACE command when monitor trace class 6 is active.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 5.
### DSNX... Messages

**DSNX100I**  
bind-type SQL WARNING USING  
authorization-id AUTHORITY PLAN=plan-id  
DBRM=dbrm name STATEMENT=statement  
object name IS NOT DEFINED  

**Explanation:**  
The indicated object is not defined in the DB2 catalog.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>bind-type</td>
<td>Type of BIND subcommand that caused the warning: BIND, REBIND</td>
</tr>
<tr>
<td>authorization-id</td>
<td>Authorization ID used during the BIND process: for a BIND subcommand, indicates the authorization ID of the plan owner; for a REBIND subcommand, indicates the authorization ID of the owner specified by the subcommand, or the latest owner of the plan. If this is a remote rebinding, and the OWNER was not specified in the subcommand, then “REMOTE OWNER” will be output.</td>
</tr>
<tr>
<td>plan-id</td>
<td>Name of the application plan specified in the BIND subcommand, blank if the application plan is not specified.</td>
</tr>
<tr>
<td>dbrm name</td>
<td>Name of the DBRM that contains the reference to the indicated object.</td>
</tr>
<tr>
<td>statement number</td>
<td>Statement number of the SQL statement referencing the name of the object.</td>
</tr>
<tr>
<td>object name</td>
<td>Name of the object that is not defined in the DB2 catalog.</td>
</tr>
</tbody>
</table>

**System Action:**  
A valid plan is created if no errors are detected and VALIDATE(RUN) is in effect.

**System Programmer Response:**  
Ensure that the indicated object is not defined in the DB2 catalog.

This statement is bound dynamically on each execution of the statement. For better performance, REBIND the application program after the indicated object is created.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>bind-type</td>
<td>Type of BIND subcommand that caused the warning: BIND or REBIND</td>
</tr>
<tr>
<td>authorization-id</td>
<td>Authorization ID used during the bind process: for a BIND subcommand, it is the authorization ID of the plan owner. For a REBIND subcommand, it is the authorization ID of the owner specified by the subcommand, or the latest owner of the plan. If this is a remote operation, and the OWNER was not specified in the subcommand, then REMOTE OWNER is output.</td>
</tr>
<tr>
<td>plan-id</td>
<td>Name of the application plan specified in the BIND subcommand. If the application plan is not specified, this field is blank.</td>
</tr>
<tr>
<td>dbrm name</td>
<td>Name of the DBRM that contains the reference to the indicated object.</td>
</tr>
<tr>
<td>statement number</td>
<td>Statement number of the SQL statement referencing the indicated table.</td>
</tr>
</tbody>
</table>

**System Action:**  
A valid plan is created if no errors are detected and VALIDATE(RUN) is in effect.

**System Programmer Response:**  
Ensure that the required authorization ID does not have a privilege required for application plan execution.

### DSNX102I

bind-type SQL WARNING USING  
authorization-id AUTHORITY PLAN=plan-id  
DBRM=dbrm name STATEMENT=statement  
THE REQUIRED INDEX HAS NOT BEEN CREATED ON TABLE table name IN PARTITIONED TABLESPACE table space name  

**Explanation:**  
There was an attempt to reference the table in the table space (both specified in the message) when the required index was not yet created.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>bind-type</td>
<td>Type of BIND subcommand that caused the warning: BIND or REBIND</td>
</tr>
<tr>
<td>authorization-id</td>
<td>Authorization ID used during the bind process: for a BIND subcommand, it is the authorization ID of the plan owner. For a REBIND subcommand, it is the authorization ID of the owner specified by the subcommand, or the latest owner of the plan. If this is a remote operation, and the OWNER was not specified in the subcommand, then REMOTE OWNER is output.</td>
</tr>
<tr>
<td>plan-id</td>
<td>Name of the application plan specified in the BIND subcommand. If the application plan is not specified, this field is blank.</td>
</tr>
<tr>
<td>dbrm name</td>
<td>Name of the DBRM that contains the reference to the indicated object.</td>
</tr>
<tr>
<td>statement number</td>
<td>Statement number of the SQL statement referencing the indicated table.</td>
</tr>
</tbody>
</table>

**System Action:**  
A valid plan is created if no errors are detected and VALIDATE(RUN) is in effect.

**System Programmer Response:**  
Ensure that the required index is not yet created.
of this statement results in an error. This statement is bound dynamically on each execution of the statement. For better performance, rebind the application program after the required index is created.

**DSNX103I**

bind-type SQL WARNING USING
authorization-id AUTHORITY PLAN=plan-id
DBRM=dbrm name STATEMENT=statement
number BIND ISOLATION LEVEL RR CONFLICTS WITH TABLESPACE LOCKSIZE PAGE OR LOCKSIZE ROW

**Explanation:** Because of the possible inconsistency between the isolation level of the application and the LOCKSIZE of the table space, table space locking is used to protect the integrity of the application.

bind-type Type of BIND subcommand that caused the warning: BIND or REBIND
authorization-id Authorization ID used during the bind process. For a BIND subcommand, it is the authorization ID of the plan owner. For a REBIND subcommand, it is the authorization ID of the owner specified by the subcommand, or the latest owner of the plan. If this is a remote operation, and the OWNER was not specified in the subcommand, then REMOTE OWNER is output.
plan-id Name of the application plan specified in the BIND subcommand. If the application plan is not specified, this field is blank.
dbrm name Name of the DBRM that contains the reference to the indicated table.
statement number Statement number of the SQL statement referencing the indicated table.

**System Action:** A valid plan is created if no errors are detected.

**DSNX105I**

bind-type SQL WARNING USING
authorization-id AUTHORITY PLAN=plan-id
DBRM=dbrm name STATEMENT=statement
number SQLCODE=sqlcode
sqlstate=sqlstate
TOKENS=token list

**Explanation:** An SQL warning code was generated while processing an SQL statement.

bind-type The type of subcommand that caused the warning: BIND or REBIND
authorization-id Indicates the authorization ID used during the bind process. For a BIND subcommand, it is the authorization ID of the plan owner. For a REBIND subcommand, it is the authorization ID of the owner specified by the subcommand, or the latest owner of the plan. If this is a remote operation, and the OWNER was not specified in the subcommand, then REMOTE OWNER is output.
plan-id Name of the application plan specified in the BIND subcommand. If the application plan is not specified, this field is blank.
sqrcode A product specific code which identifies the particular SQL warning condition. The value and semantics of the code are the same as the SQL return codes documented in [Section 2. SQL Return Code on page 17](#).
dbrm name Name of the DBRM that contains the reference to the indicated table.
statement number Statement number of the SQL statement containing the problem.
token list Sequence of one or more tokens separated by blanks. Refer to [Section 2. SQL Return Codes on page 17](#) for an explanation of tokens.

**System Action:** A valid plan is created if no errors are detected.

**System Programmer Response:** If you do not want table space locking, use isolation level UR, CS or RS.
**DSNX106I**  ATTEMPTED REBIND OF PACKAGE  pkg-id  
RESULTED IN A TOTAL OF number ERRORS

**Explanation:** Errors have been detected during the remote REBIND process. Only the first REBIND error will produce a specific message. Additional errors will simply be totaled, and the number will be returned to the user.

**pkg-id**  Name of the package specified in the subcommand.

**number**  Total number of errors in the remote REBIND

**System Action:** The package was not rebound.

**System Programmer Response:** See previously output message to determine the initial error that caused the subcommand to be terminated unsuccessfully.

**DSNX200I**  bind-type SQL ERROR USING authorization-id 
AUTHORITY PLAN=plan-id DBRM=dbrm name 
STATEMENT=statement number 
SQLCODE=sqlcode 
SQLSTATE=sqlstate 
TOKENS=token list 
CSECT=csect name RDS CODE=location code

**Explanation:** An error has been detected while processing an SQL statement.

**bind-type**  BIND | REBIND  
indicates type of BIND subcommand that caused the error.

**authorization-id**  
indicates the authorization ID used during the bind process. For a BIND subcommand, indicates the authorization ID of the plan owner. For a REBIND subcommand, indicates the authorization ID of the owner specified by the subcommand, or the latest owner of the plan.

**plan-id**  Name of the application plan specified in the BIND subcommand. Blank if the application plan is not specified.

**sqlcode**  A product specific code which identifies the particular SQL error detected. The value and semantics of the code are the same as the SQL return codes documented in Section 2. SQL Return Codes on page 17.

**sqlstate**  A common code which identifies the particular SQL error detected.

**dbrm name**  Name of the DBRM that contains the error.

**statement-number**  Statement number containing the SQL error.

**token list**  Optional sequence of one or more tokens separated by blanks. These are the tokens that are to be substituted into the text of the error code as described at the beginning of Section 2. SQL Return Codes on page 17.

**csect**  Name of the CSECT detecting the problem.

**rds code**  Unique code that identifies the location within the CSECT when the problem is detected.

**System Action:** No application plan is created.

**System Programmer Response:** Correct the SQL errors in the application program associated with the indicated DBRM. Precompile the application program, and reinvoke the BIND subcommand.

**DSNX201I**  bind-type SQL ERROR USING authorization-id 
AUTHORITY PLAN=plan-id DBRM=dbrm name 
STATEMENT=statement number 
SQLCODE=sqlcode 
SQLSTATE=sqlstate 
TOKENS=token list 
CSECT=csect name RDS CODE=location code

**Explanation:** The content of a DBRM has been modified after the precompilation process.

**bind-type**  Type of BIND subcommand that caused the warning: BIND, REBIND

**authorization-id**  Authorization ID of the plan owner.

**plan-id**  Name of the application plan specified in the BIND or REBIND subcommand (or blank if the application plan is not specified).

**dbrm name**  Name of the DBRM that is in error.

**System Action:** No application plan is created.

**System Programmer Response:** Precompile the application program associated with the indicated DBRM. Reinvoke the BIND subcommand.

**DSNX202I**  INVALID AMODE ATTRIBUTE FOUND FOR DATE OR TIME INSTALLATION REPLACEABLE EXIT ROUTINE module-name

**Explanation:** During DB2 startup, the Relational Data System subcomponent loads the Date (DSNXVDTX) and Time (DSNXVTMX) exit routines. These routines must have the link-edited attributes AMODE(31) and RMODE(ANY). The module listed in the message ‘module-name’ did not have the correct addressing attributes. If the date and time LOCAL installation option is specified, DB2 will be unable to execute the date and time functions required by the exit routine that failed to load.

**System Action:** The load module is deleted. DB2 startup will continue.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** When DB2 is stopped, the date and time exit routine must be link-edited again with the correct AMODE and RMODE control statements. For more information, refer to Appendix B (Volume 2) of DB2 Administration Guide.

**DSNX203I**  LOAD OF THE DATE OR TIME INSTALLATION REPLACEABLE EXIT ROUTINE module-name FAILED WITH MVS ABEND CODE = abend-code 
REASON CODE = reason-code DB2 STARTUP WILL CONTINUE

**Explanation:** During DB2 startup, the Relational Data System subcomponent loads the Date (DSNXVDTX) and time (DSNXVTMX) exit routines. During the load of EXIT ROUTINE ‘module-name’, MVS issued the abend code and reason code that would cause abnormal termination of the task, but the abend was suppressed. If the date and time LOCAL option is
specified, DB2 will be unable to execute the date and time functions required by the exit routine that failed to load.

System Action: The load failed. DB2 startup will continue.

Operator Response: Notify the system programmer.

System Programmer Response: When DB2 is stopped, the date and time exit routine must be link-edited correctly. For more information, refer to Appendix B (Volume 2) of DB2 Administration Guide.

---

**DSNX204I csect-name ERROR LOADING THE DB2 CATALOG, REASON reason: DB2 STARTED ACCESS(MAINT)**

Explanation: The internal structure (DBD) for the catalog database (DSNDB06) was either not found or inconsistent when DB2 was started. See the appropriate reason for a more detailed description of the problem.

The reason is one of the following:

0 An error occurred reading the DBD01 table space. Check the Console for messages and SYS1.LOGREC for abends.

1 The expected level of the DBD for DSNDB06 is the previous release, but objects exist in the DBD for a current or later release.

2 The expected level of the DBD for DSNDB06 is the current release, but objects exist in the DBD for a later release.

3 The expected level of the DBD for DSNDB06 is a later release, but objects do not exist in the DBD for a later release.

4 The level of the DBD for DSNDB06 is unknown to this version of DB2.

System Action: DB2 was started ACCESS(MAINT).

System Programmer Response: Do not run any CREATES, ALTERS, DROPS, GRANTS, REVOKEs or BINDs when in this state; it might corrupt your catalog and directory. Determine the problem with the DSNDB01.DBD01 table space. An improper REPAIR or RECOVER of the table space might have been run. Fix the problem while in ACCESS(MAINT) mode and then stop and start DB2. See Section 4 (Volume 1) of Administration Guide for more information on recovering the DSNDB01.DBD01 table space.

Problem Determination: If you suspect an error in DB2 or the table space is in an inconsistent state refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B, Problem determination on page 1051: 1, 2.

---

**DSNX205I csect-name THE DATA DEFINITION CONTROL OBJECT DEFINITIONS AND ATTRIBUTES ON MEMBER member-name ARE NOT THE SAME.**

Explanation: One or more data definition control object definitions and attributes on member member-name and on this member are not the same. The data definition control object definitions and attributes are defined in the initialization parameter module DSNZPARM.

System Action: Processing continues.

System Programmer Response: Use the same data definition control table object definitions and attributes for all members of the DB2 data sharing group. See Section 2 of DB2 Installation Guide for information on defining data definition control objects and attributes in DSNZPARM.

---

**DSNX206I LOAD OF THE ACCESS CONTROL AUTHORIZATION INSTALLATION REPLACEABLE EXIT ROUTINE module-name FAILED WITH MVS ABEND CODE = abend-code AND REASON CODE = reason-code DB2 STARTUP WILL CONTINUE**

Explanation: During DB2 startup, the Relational Data System subcomponent loads the Access Control Authorization (DSNX@XAC) exit routine. During the load of EXIT ROUTINE module-name, MVS issued the abend code and reason code that indicates abnormal termination of the task. However, the abend was suppressed. DB2 will not use the Access Control Authorization (DSNX@XAC) exit to perform authorization checking. DB2 authorization checking will be performed.

System Action: The load failed. DB2 startup will continue.

Operator Response: Notify the system programmer.

System Programmer Response: After DB2 has stopped, you must properly link-edit the Access Control Authorization exit routine. For more information, refer to Appendix B (Volume 2) of DB2 Administration Guide.

---

**DSNX207I INVALID AMODE ATTRIBUTE FOUND FOR ACCESS CONTROL AUTHORIZATION INSTALLATION REPLACEABLE EXIT ROUTINE module-name**

Explanation: During DB2 startup, the Relational Data System subcomponent loads the Access Control Authorization (DSNX@XAC) exit routine. This routine must have the link-edited attributes AMODE(31) and RMODE(ANY). The module listed in the message module-name did not have the correct addressing attributes. DB2 will not use the Access Control Authorization (DSNX@XAC) exit to perform authorization checking. DB2 authorization checking will be performed.

System Action: The system deletes the load module. DB2 startup will continue.

Operator Response: Notify the system programmer.

System Programmer Response: After DB2 has stopped, you must properly link-edit the Access Control Authorization exit routine with the correct AMODE and RMODE control statements. For more information, refer to Appendix B (Volume 2) of DB2 Administration Guide.

---

**DSNX905I csect-name PROCEDURE OR FUNCTION name TERMINATED ABNORMALLY ASID= asid WLM_ENV= wlmenv**

Explanation: A stored procedure terminated abnormally while attempting to satisfy an SQL CALL statement for an SQL application.

name The name of the stored procedure or function that terminated abnormally.

asid The MVS ASID of the address space where the stored procedure executed.

wlmenv The name of the WLM application environment where the stored procedure executed. If it executed in the DB2-established stored procedures address space, this field will contain blanks.
The abnormal termination count for procedure `procname` was reached. The procedure is stopped and further requests for the procedure are rejected.

**System Programmer Response:** Correct the cause of the abnormal termination. If the correction requires the stored procedure to be linkededit again, then it might be necessary to cause the corrected MVS load module to be reloaded. Different commands must be used to cause this reloading depending on the environment in which the stored procedure was executed.

If it was run in a WLM-established stored procedures address space, issue the MVS `VAR Y WLM,APPLENV=name,REFRESH` command.

If it was run in the DB2-established stored procedures address space, issue the `-START PROCEDURE` command.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 4, 5.

```
<table>
<thead>
<tr>
<th>DSNX906I</th>
<th>csect-name PROCEDURE OR FUNCTION name TERMINATED ABNORMALLY. THE PROCEDURE HAS BEEN STOPPED. ASID= asid WLM_ENV= wlmenv</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explanation:</strong></td>
<td>A stored procedure terminated abnormally while attempting to satisfy an SQL CALL statement for an SQL application.</td>
</tr>
<tr>
<td><strong>name</strong></td>
<td>The name of the stored procedure or function that terminated abnormally</td>
</tr>
<tr>
<td><strong>asid</strong></td>
<td>The MVS ASID of the address space where the stored procedure executed.</td>
</tr>
<tr>
<td><strong>wlmenv</strong></td>
<td>The name of the WLM application environment where the stored procedure executed. If it executed in the DB2-established stored procedures address space, this field will contain blanks.</td>
</tr>
<tr>
<td><strong>System Action:</strong></td>
<td>The SQL CALL statement fails, and the SQL application is forced to roll back.</td>
</tr>
<tr>
<td><strong>Operator Response:</strong></td>
<td>Contact the system programmer.</td>
</tr>
</tbody>
</table>
```

The abnormal termination count for procedure `procname` was reached. The procedure is stopped and further requests for the procedure are rejected.

**System Programmer Response:** Correct the cause of the abnormal termination. If the correction requires the stored procedure to be linkededit again, then it might be necessary to cause the corrected MVS load module to be reloaded. Different commands must be used to cause this reloading depending on the environment in which the stored procedure was executed.

If it was run in a WLM-established stored procedures address space, issue the MVS `VAR Y WLM,APPLENV=name,REFRESH` command.

If it was run in the DB2-established stored procedures address space, issue the `-START PROCEDURE` command.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 4, 5.

```
<table>
<thead>
<tr>
<th>DSNX921I</th>
<th>csect-name SOME SQL CALL STATEMENTS CANNOT BE PROCESSED, BECAUSE REQUIRED RESOURCES ARE NOT AVAILABLE. REASON=reason TYPE=type NAME=name</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explanation:</strong></td>
<td>DB2 was unable to validate the attributes of the SYSIBM.SYRSOUTINES catalog table and related objects because of an unavailable resource.</td>
</tr>
<tr>
<td><strong>reason</strong></td>
<td>The DB2 reason code describing the unavailable resource</td>
</tr>
<tr>
<td><strong>type</strong></td>
<td>The resource type</td>
</tr>
<tr>
<td><strong>name</strong></td>
<td>The name of the resource</td>
</tr>
<tr>
<td><strong>System Action:</strong></td>
<td>SQL CALL statements are rejected.</td>
</tr>
<tr>
<td><strong>System Programmer Response:</strong></td>
<td>Resolve the unavailable resource problem. Then use the <code>-START PROCEDURE</code> command to cause DB2 to accept SQL CALL statements.</td>
</tr>
<tr>
<td><strong>Operator Response:</strong></td>
<td>Note the <code>reason</code> code, the <code>type</code> code, and the <code>name</code>. See the Problem Determination section for an explanation of the collected data.</td>
</tr>
<tr>
<td><strong>Problem Determination:</strong></td>
<td>The reason code tells why the resource is unavailable. Reason codes are described in &quot;Part 4. Reason Codes&quot;. Use the table defined for message</td>
</tr>
</tbody>
</table>
DSNT500I to find the type of resource identified in the message.

**DSNX922I csect-name BEGINNING DISCONNECTION OF STORED PROCEDURE ADDRESS SPACES**

**Explanation:** This message is produced during -STOP DB2 processing. It indicates that DB2 SQL processing has been quiesced, and DB2 is now beginning the termination process for the stored procedures address spaces.

**DSNX923I csect-name ALL STORED PROCEDURE ADDRESS SPACES ARE NOW DISCONNECTED.**

**Explanation:** This message is produced during -STOP DB2 processing. It indicates that all of the stored procedure address spaces are now disconnected from DB2 and the stop of DB2 will continue.

WLM-established stored procedure address spaces are terminated by WLM after the disconnection from DB2.

**DSNX940I csect-name - DISPLAY PROCEDURE REPORT FOLLOWS -**

**Explanation:** This message is the title for the report output from the DISPLAY PROCEDURE command. It precedes messages DSNX941I and DSNX942I. Message DSNX943I might also be displayed. The final message for the report is DSNX945I.

**System Action:** The DISPLAY PROCEDURE command processing continues.

**DSNX941I PROCEDURE MODULE STATUS ACTIVE QUEUED MAXQUE TIMEOUT WLM_ENV**

**Explanation:** This message displays the column headings for the list of stored procedures generated by the DISPLAY PROCEDURE command. The definitions are:

- **PROCEDURE** The name of the stored procedure.
- **STATUS** The status of the stored procedure. The status can be any of the following values:
  - **STARTED** The stored procedure is able to accept SQL CALL requests.
  - **STOPABN** The stored procedure was stopped because of the previous abnormal termination of the stored procedure application. SQL CALL requests for the stored procedure are rejected. The -START PROCEDURE command can be used to place the stored procedure in STARTED status.
  - **STOPREJ** The stored procedure was placed in this status by the STOP PROCEDURE ACTION(REJECT) command. SQL CALL requests for the stored procedure are rejected. The -START PROCEDURE command can be used to place the stored procedure in STARTED status.
  - **STOPQUE** The stored procedure was stopped. SQL CALL requests for the stored procedure are queued until the stored procedure is started or the installation-defined timeout interval expires. The -START PROCEDURE command can be used to place the stored procedure in STARTED status.
- **ACTIVE** The number of DB2 agents that are currently running this stored procedure.
- **QUEUED** The number of DB2 agents that are currently waiting for this stored procedure to be scheduled.
- **MAXQUE** The maximum number of DB2 agents that have waited for this stored procedure to be scheduled since DB2 was started.
- **TIMEOUT** The number of times an SQL CALL statement timed out while waiting for this stored procedure to be scheduled since DB2 was started.
- **WLM_ENV** The MVS Workload Manager environment name for this stored procedure.

**System Action:** The DISPLAY PROCEDURE command processing continues.

- **active** The number of DB2 agents that are currently running this stored procedure.
- **maxact** The maximum number of DB2 agents that have run this stored procedure concurrently since DB2 was started.
- **queued** The number of DB2 agents that are currently waiting for this stored procedure to be scheduled.
- **maxque** The maximum number of DB2 agents that have waited for this stored procedure to be scheduled since DB2 was started.
- **timeout** The number of times an SQL CALL statement timed out while waiting for a stored procedure to be scheduled since DB2 was started.

An SQL CALL statement can time out for several reasons:
The procedure can be stopped by the STOP PROCEDURE ACTION(QUEUE) command, causing requests for the procedure to be queued until the installation-defined time interval expires.

There might not be enough MVS TCBs in the DB2 stored procedures address space to satisfy the volume of SQL CALL statements.

The MVS dispatching priority of the DB2 stored procedures address space might be too low to process the stored procedure requests in a timely manner.

System Action: The DISPLAY PROCEDURE command processing continues.

**DSNX943I PRO ribbon Procedure begin - end STOP (act)**

Explanation: This message indicates a STOP PROCEDURE command was issued with an invalid procedure name, causing a range of procedure names to be stopped. This message follows the DSNX940I, DSNX941I, and any DSNX942I messages.

begin The first procedure name in the range of procedure names that are currently stopped

end The last procedure name in the range of procedure names that are currently stopped

act The action provided on the STOP PROCEDURE command

System Action: The DISPLAY PROCEDURE command processing continues.

**DSNX944I csect-name THE STORED PROCEDURE FUNCTION IS NOT AVAILABLE**

Explanation: This message is returned by the START, STOP, and DISPLAY PROCEDURE command when the stored procedure facility is not available. It can also be produced when an MVS START command is used to start the stored procedures address space.

The following conditions cause the stored procedure facility to be unavailable:

- The DB2 DSNZPARM module does not include a value for the stored procedure JCL procedure name. This prevents DB2 from starting the stored procedure function.
- DB2 was unable to start the stored procedures address space. This can be caused by a JCL error in the stored procedures JCL procedure.
- DB2 is running on MVS/XA, which does not support the stored procedure function.

System Action: If a START, STOP, or DISPLAY PROCEDURE command is in progress, the command terminates.

If an MVS START command is used to start the stored procedures address space, the stored procedures address space terminates.

**DSNX945I DISPLAY PROCEDURE REPORT COMPLETE**

Explanation: The output from the DISPLAY PROCEDURE command is complete. This message follows the DSNX940I, DSNX941I, and any DSNX942I messages.

System Action: The DISPLAY PROCEDURE command processing continues.

**DSNX946I csect-name START PROCEDURE SUCCESSFUL FOR token**

Explanation: The START PROCEDURE command completed successfully.

token The procedure name supplied on the START PROCEDURE command.

System Action: The START PROCEDURE COMMAND processing continues.

**DSNX947I csect-name STOP PROCEDURE SUCCESSFUL FOR token**

Explanation: The STOP PROCEDURE command completed successfully.

token The procedure name supplied on the STOP PROCEDURE command

System Action: The STOP PROCEDURE command processing continues.

**DSNX950I csect-name PROCEDURE procname HAS NOT BEEN ACCESSED**

Explanation: The procedure name supplied on the DISPLAY PROCEDURE command has not yet been accessed by any SQL CALL statement. The specified procname might not be present in the SYSIBM.SYSROUTINES catalog table.

System Action: Processing continues for any additional procedure names supplied on the command.

**DSNX951I csect-name A STORED PROCEDURE CANNOT ISSUE START/STOP PROCEDURE COMMANDS**

Explanation: A stored procedure attempted to issue the START or STOP PROCEDURE command. This is not allowed because the START and STOP PROCEDURE commands might cause the stored procedures address space tasks to terminate.

System Action: The START or STOP PROCEDURE command is rejected.

**DSNX952I csect-name THE DB2-Established STOREDPROCEDURE ADDRESS SPACE IS ALREADY STARTED**

Explanation: DB2 supports only one DB2-established stored procedure address space.

An MVS address space attempted to connect to DB2 as a DB2-established stored procedure address space, but another DB2-established stored procedure address space is already connected to DB2.

DB2 supports multiple WLM-established stored procedure address spaces.
System Action: The attempt to connect to DB2 is rejected.

**DSNX953E**  
**csect-name** STORED PROCEDURE JOBNAME OR STARTED TASK NAME DOES NOT MATCH ZPARM

Explanation: An MVS address space attempted to identify itself to DB2 as the DB2-established stored procedure address space, but the JOBNAME or started task name of the address space did not match the stored procedure's MVS procedure name recorded in the DB2 DSNZPARM module.

System Action: The attempt to connect to DB2 is rejected.

System Programmer Response: If you want to start the DB2-established stored procedure address space from the MVS console, you must use an MVS procedure name that matches the value in the DB2 DSNZPARM module.

**DSNX954I**  
**csect-name** ATTEMPT TO START DB2-Established STORED PROCEDURE ADDRESS SPACE PROC= jclproc FAILED

Explanation: DB2 attempted to start the DB2-established stored procedure address space using the JCL proc name specified in the DB2 DSNZPARM module. MVS failed the request.

Possible causes for the start failing include:
- JCL proc not found
- JCL error in the proc

jclproc The name of the JCL PROC used to start the stored procedures address space.

System Action: The DB2-established stored procedures address space will not be available.

System Programmer Response: Correct the error and use the -START PROCEDURE(*) command to start the DB2-established stored procedure address space.

**DSNX955I**

Explanation: A blank line that appears in the DISPLAY PROCEDURE or DISPLAY FUNCTION command.

System Action: The DISPLAY command processing continues.

**DSNX956I**

----- SCHEMA = schema

Explanation: This message reports the schema name requested on the DISPLAY PROCEDURE or DISPLAY FUNCTION command.

schema The schema name for the stored procedure or function.

System Action: The DISPLAY command processing continues.

**DSNX957I**  
**csect-name** INSUFFICIENT AUTHORITY FOR OBJECT object

Explanation: This message is issued when a START, STOP, or DISPLAY command is issued for a stored procedure or user-defined function that the user is not authorized to START, STOP, or DISPLAY.

object The stored procedure or user-defined function that failed the authorization test.

System Action: The START, STOP, or DISPLAY command continues.

**DSNX960E**  
**csect-name** SOME SQL CALL STATEMENTS CANNOT BE PROCESSED, BECAUSE THE Language Environment ROUTINE CEEPIPI CANNOT BE LOADED SSN= ssn PROC= jclproc ASID= asid WLM_ENV= wlmenv

Explanation: To execute an SQL CALL statement, DB2 must load the Language Environment interface module (CEEPIPI). If the CEEPIPI module is not included in an accessible data set such as STEPLIB data sets, JOBLIB data sets, or the LPA library, DB2 is unable to call Language Environment to process stored procedure or function requests.

ssn The name of the DB2 subsystem to which the stored procedures address space was connected.

ssn The name of the JCL PROC used to start this stored procedures address space.

asid The MVS ASID of the address space where the load was issued.

wlmenv The name of the WLM application environment where the load was issued. If it executed in the DB2-established stored procedures address space, this field will contain blanks.

System Action: The address space attempting to process stored procedures or functions terminates.

System Programmer Response: Change the STEPLIB DD statement in the JCL used to start the stored procedure address space, or install the CEEPIPI module in one of the libraries already accessible to the address space.

After the CEEPIPI module is accessible, use one of the following techniques to restart the failing stored procedure address space:
- If the error was in a WLM-established stored procedures address space, use the MVS VARY WLM,APPLENV=name,RESUME command.
- If the error was in the DB2-established stored procedures address space, use the -START PROCEDURE(*) command.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

```sql
# DSNX961I  csect-name ATTEMPT TO PERFORM JNI # FUNCTION function FAILED FOR STORED PROCEDURE procedure-name SSN=ssn # PROC=proc ASID=asid CLASS=class-name # METHOD=method-name ERROR INFO= error-information # Explanation: A WLM-established stored procedures address space was unable to perform a Java Native Interface (JNI) function. # function. # The JNI function that failed. Possible values are: # GET_DEFAULTS JNI_GetDefaultJavaVMInitArgs # CREATE_VM JNI_CreateJavaVM # CALL_METHOD CallStaticVoidMethodA
```
Fix the problem that is identified in error-information.

System Action: The CALL statement fails.
System Programmer Response: Take the appropriate action, depending on the value of func:

GET_DEFAULTS or CREATE_VM

Ensure that the ET/390 DLLs are in the STEPLIB concatenation for the stored procedures address space, or the OS/390 UNIX System Services external link is set correctly to the PDSE that contains the DLLs.

CALL_METHOD

Fix the problem that is identified in error-information.

---

**DSNX962I**

The Language Environment CEEPIPI service returned an unexpected return code rc for function.

**func**

The function requested by DB2. Possible values are:

- **add_entry**
  Add an entry to the Language Environment PIPI table dynamically.

- **call_main**
  Run a main program stored procedure using an existing Language Environment run time environment.

- **call_sub**
  Run a sub program stored procedure using an existing Language Environment run time environment.

- **delete_entry**
  Delete an entry from the Language Environment PIPI table dynamically.

- **end_seq**
  End a sequence of calls using CEEPIPI.

**ssn**

The name of the DB2 subsystem to which the stored procedures address space was connected.

**jclproc**

The name of the JCL PROC used to start this stored procedures address space.

**asid**

The MVS ASID of the address space where the CEEPIPI error was encountered.

**wlmenv**

The name of the WLM application environment where the CEEPIPI error was encountered. If it executed in the DB2-established stored procedures address space, this field will contain blanks.

**System Action:**

Processing continues.

---

**DSNX964I**

The DB2-established stored procedures address space for subsystem subs is starting.

**subs**

The name of the DB2 subsystem to which the DB2-established stored procedures address space is connected.

**System Action:**

Processing continues.

---

**DSNX965I**

The DB2-established stored procedures address space for subsystem subs is stopping.

**subs**

The name of the DB2 subsystem to which the DB2-established stored procedures address space was connected.

**System Action:**

DB2 continues to process any stored procedures that are currently running. If a new SQL CALL statement
is received that is to be executed in the DB2-established stored procedures address space the request is queued.

**DSNX966I** csect-name STORED PROCEDURE OR FUNCTION sp FAILED. Language Environment ENCLAVE RC = erc, FEEDBACK INFORMATION = fi SSN= ssn PROC= jclproc ASID= asid WLM_ENV= wlmenv

**Explanation:** DB2 uses the Language Environment CEEPIPI call_main or call_sub service to execute user-written stored procedures or user-defined function. The CEEPIPI interface returned information indicating a failure while executing the stored procedure.

- **sp** The stored procedure or function name that was called using CEEPIPI.
- **erc** The Language Environment enclave return code.
- **fi** Contains one or two message identifiers. The message identifiers are constructed from the Language Environment condition token.
  - Single message: Facility_Id combined with Msg_No
  - Two messages: Facility_Id combined with Class_Code and Facility_Id combined with Cause_Code
- **ssn** The name of the DB2 subsystem that called the stored procedure or function.
- **jclproc** The name of the JCL PROC used to start this stored procedures address space.
- **asid** The MVS ASID of the address space where the stored procedure executed.
- **wlmenv** The name of the WLM application environment where this function was invoked.

**System Action:** The stored procedures service task that encountered the error terminates. If this is the last service task in that address space, then that address space terminates.

**System Programmer Response:** A WLM-established stored procedures address space could not connect to the Work Load Manager services of MVS because the WLM application environment was in a stopped or quiesced state.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 4, 5.

**DSNX968I** csect-name STORED PROCEDURE ADDRESS SPACE IS UNABLE TO CONNECT TO WLM BECAUSE WLM_ENV = wlmenv IS STOPPED OR QUIESCED

**Explanation:** A DB2 stored procedures address space could not connect to the Work Load Manager services of MVS because the WLM application environment was in a stopped or quiesced state.

- **wlmenv** The name of the WLM application environment for which the stored procedure address space was being started.

**System Action:** The stored procedures address space terminates.

**System Programmer Response:** Correct the WLM application environment name that is being used by stored procedures address space JCL proc.

To change the status of the application environment use the MVS VARY WLM,APPLENV=wlmenv,RESUME command.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 4, 5.

**DSNX967I** csect-name ATTEMPT TO PERFORM WLM FUNCTION func FAILED WITH WLM RC= rc RSN= rsn SSN= ssn PROC= jclproc ASID= asid WLM_ENV= wlmenv

**Explanation:** A WLM-established stored procedures address space was unable to perform a WLM operation required to communicate with WLM.

- **func** The WLM function that failed. Possible values are:
  - IWMCONN
  - IWMSSEL
  - IWMSTBGN
  - IWMSTEND

- **rc** The WLM return code.
- **rsn** The reason code.
- **ssn** The name of the DB2 subsystem to which this stored procedure address space was connected.
- **jclproc** The name of the JCL PROC used to start this stored procedures address space.
- **asid** The MVS ASID of the address space where this function was invoked.
- **wlmenv** The name of the WLM application environment where this function was invoked.

**System Action:** The stored procedures service task that encountered the error terminates. If this is the last service task in that address space, then that address space terminates.

**System Programmer Response:** A WLM-established stored procedures address space the request is queued. If it executed in the DB2-established stored procedures address space, then that address space terminates.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 4, 5.

**DSNX969I** function status active queued maxque timeout wlm_env

**Explanation:** This message lists the DISPLAY SPECIFIC FUNCTION information for a given external function. The definitions of the columns are:

- **function** The name of the external function.
- **status** The status of the function. The status can be any of the following values:
The function is able to accept SQL statement requests.

STOPABN
The function was stopped because of the previous abnormal termination of the function application. SQL statement requests for the function are rejected. The -START SPECIFIC FUNCTION command can be used to place the function in STARTED status.

STOPQUE
The function was stopped. SQL statement requests for the function are queued until the function is started or the installation-defined timeout interval expires. The -START SPECIFIC FUNCTION command can be used to place the function in STARTED status.

STOPREJ
The function was placed in this status by the STOP SPECIFIC FUNCTION ACTION(REJECT) command. SQL statement requests for the function are rejected. The -START SPECIFIC FUNCTION command can be used to place the function in STARTED status.

active
The number of DB2 agents that are currently running this function.

queued
The number of DB2 agents that are currently waiting for this function to be scheduled.

maxque
The maximum number of DB2 agents that have waited for this function to be scheduled, since the last START SPECIFIC FUNCTION command was issued for this function.

timeout
The number of times an SQL statement timed out while waiting for a function to be scheduled since the last START SPECIFIC FUNCTION command was issued for this function.

wlm_env
The MVS Workload Manager environment name for this function.

System Action: The DISPLAY SPECIFIC FUNCTION command processing continues.

DSNX972I DISPLAY FUNCTION SPECIFIC REPORT COMPLETE
Explanation: The output from the DISPLAY FUNCTION SPECIFIC command is complete. This message follows DSNX975I, DSNX969I, and any DSNX970I messages.

System Action: The DISPLAY FUNCTION SPECIFIC command processing continues.

DSNX974I csect-name STOP FUNCTION SPECIFIC SUCCESSFUL FOR token
Explanation: The function name supplied on the STOP FUNCTION SPECIFIC command completed successfully.
token
The function name supplied on the STOP FUNCTION SPECIFIC command.

System Action: The STOP FUNCTION SPECIFIC command processing continues.

DSNX975I csect-name - DISPLAY FUNCTION SPECIFIC REPORT FOLLOWS-
Explanation: This message is the title for the report output from the DISPLAY FUNCTION SPECIFIC command. It precedes messages DSNX969I and DSNX970I. Message DSNX971I might also be displayed. The final message for the report is DSNX972I.

System Action: The DISPLAY FUNCTION SPECIFIC command processing continues.
**DSNX977I** csect-name FUNCTION funcname HAS NOT BEEN ACCESSED

**Explanation:** The function name supplied on the DISPLAY FUNCTION SPECIFIC command has not yet been accessed by any SQL statement. The specific funcname might not be present in the SYSIBM.SYSROUTINES catalog table.

**funcname** The name of the function.

**System Action:** Processing continues for any additional function names supplied on the command.

---

**DSNX980E** csect-name ATTEMPT TO PERFORM CALL ATTACH FUNCTION func FAILED WITH DB2 SUBSYSTEM subsys. RETURN CODE=rc, REASON CODE=reason

**Explanation:** The DB2 stored procedures address space was unable to perform a DB2 call attach operation required to communicate with DB2.

**func** The DB2 call attach function that failed. Possible values are:
- CONNECT
- OPEN
- CLOSE
- DISCONNECT

**subsys** The DB2 subsystem name involved in the call attach function

**rc** The DB2 call attach return code

**reason** The DB2 reason code

**System Action:** The stored procedures service task that encountered the error terminates. If this is the last service task in the address space, the DB2 stored procedures address space terminates.

**System Programmer Response:** Consult the DB2 DB2 Application Programming and SQL Guide to determine the cause of the DB2 call attach return code and reason code.

---

**DSNX981E** csect-name THE PARAMETER parm CONTAINS AN INVALID VALUE "string" PROC= jclproc

**Explanation:** The DB2 stored procedures address space received an invalid value in the JCL parameter used to start the address space.

**parm** The JCL parameter is specified incorrectly. Possible values are:
- SUBSYS This parameter can be invalid for the following reasons:
  - The SUBSYS parameter is null.
  - The SUBSYS parameter is too long.
  - The SUBSYS parameter contained an invalid character.
- NUMTCB This parameter can be invalid for the following reasons:
  - A comma was not present in the parameter list to separate the NUMTCB parameter from the previous parameter.
  - The NUMTCB parameter is null.

**string** The value provided for the parameter in error.

**jclproc** The name of the JCL PROC used to start this stored procedures address space.

**System Action:** The DB2 stored procedures address space terminates.

If MVS WLM is used to establish the stored procedure address space, WLM will retry the start of the address space two more times. If all three attempts fail, WLM will quiesce the WLM environment associated with the stored procedure address space.

**System Programmer Response:** Correct the JCL parameter used to invoke the DB2 stored procedure address space.

If MVS WLM is used to establish the stored procedure address space, the MVS VARY WLM,APPLENV=wlmenv,RESUME command might be required to resume the WLM application environment (wlmenv) associated with the stored procedures address space.

---

**DSNX982I** csect-name ATTEMPT TO PERFORM RRS ATTACH FUNCTION func FAILED WITH RRS ATTACH RC= rc RSN= rsn SSN= ssn PROC = jclproc ASID= asid WLM_ENV= wlmenv

**Explanation:** A WLM-established stored procedures address space was unable to perform an RRS attach operation required to communicate with DB2.

**func** The RRS attach function that failed. Possible values are:
- SPAS_ID
- SPAS_INIT_SP
- SPAS_TERM_SP

**ssn** The name of the DB2 subsystem involved with the RRS attach function.

**jclproc** The name of the JCL PROC used to start the stored procedures address space.

**asid** The MVS ASID of the address space where the function was attempted.

**wlmenv** The name of the WLM application environment where the function was attempted.
System Action: The stored procedures service task that encountered the error terminates. If this is the last service task in that address space, then that address space terminates.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination:
Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 4, 5.

### DSNX983I  csect-name  DB2 STORED PROCEDURE SUPPORT CODE AND SUBSYSTEM CODE ARE NOT AT THE SAME LEVEL  ssn= ssn PROC = jclproc

Explanation: A DB2 stored procedures address space could not connect to the DB2 subsystem. This occurred because the DB2 code in the stored procedures address space was not at the same release level as the code in the DB2 subsystem.

#### ssn
The name of the DB2 subsystem that the stored procedure address space was attempting to connect with.

#### jclproc
The name of the JCL PROC used to start the stored procedures address space.

System Action: The stored procedures address space terminates.

System Programmer Response: Correct the DB2 library name in the STEPLIB for the JCL proc for the stored procedures address space. Make the library name the same as the library name used for the DB2 subsystem address spaces. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 4, 5.

### DSNX984I  csect-name  ALL FUNCTIONS STARTED FOR THIS SCHEMA.

Explanation: All functions are started for the schema listed in the preceeding DSNX956I message. This message is issued only when STOP FUNCTION SPECIFIC(“”) was in effect.

System Action: The DISPLAY SPECIFIC FUNCTION command processing continues.

### DSNX985I  csect-name  ALL PROCEDURES STARTED FOR THIS SCHEMA.

Explanation: All procedures are started for the schema listed in the preceeding DSNX956I message. This message is issued only when a STOP PROCEDURE(“”) was in effect.

System Action: The DISPLAY PROCEDURE command processing continues.

```
# DSNX986I  ATTEMPT TO func FAILED WITH RV = rv RC = rc
#   RSN = rsn  SSN = ssn  PROC = jclproc
# Explanation: A WLM-established stored procedures address space was unable to register itself to OS/390 UNIX System Services. OS/390 UNIX System Services are not available to stored procedures running in the address space.
```

```
# func  The dub setting used by USS BPX1SDD callable service. This can be DUBPROCESS or DUBTHREAD.
# rv  The return value given by USS BPX1SDD callable service.
# rc  The return code given by USS BPX1SDD callable service.
# rsn  The reason code given by USS BPX1SDD callable service.
# ssn  The name of the DB2 subsystem to which this stored procedure address space was connected.
# proc  The name of the JCL PROC used to start this stored procedures address space.
```

### DSNX987I  csect-name  SCHEMA NAME  scheme-name INVALID, COMMAND IGNORED

Explanation: The function name or procedure name supplied on the DISPLAY, START, or STOP, FUNCTION SPECIFIC or PROCEDURE command uses a invalid wildcard schema name. The qualified routine name must specify a full schema name, “*”, “*.*”, or blanks.

#### scheme-name
The schema name containing invalid characters.

System Action: The START, STOP, or DISPLAY command is rejected.

### DSNX988I  csect-name  ALL OTHER FUNCTIONS IN OTHER SCHEMAS STOPPED  act

Explanation: A STOP FUNCTION SPECIFIC(“”) is currently in effect. Any functions not listed in the preceeding DSNX969, DSNX971, and DSNX976 messages are stopped act.

#### act
The action provided on the STOP FUNCTION command.

System Action: The DISPLAY SPECIFIC FUNCTION command processing continues.

### DSNX989I  csect-name  ALL OTHER PROCEDURES IN OTHER SCHEMAS STOPPED  act

Explanation: A STOP PROCEDURE(“”) is currently in effect. Any functions not listed in the preceeding DSNX942, DSNX943, and DSNX950 messages are stopped act.

#### act
The action provided on the STOP PROCEDURE command.

System Action: The DISPLAY PROCEDURE command processing continues.
**DSNX990E**  
**csect-name** IMS ODBA INITIALIZATION FAILED  
**BECAUSE THE CALLABLE INTERFACE CANNOT BE LOADED**

**Explanation:** The IMS ODBA callable interface module cannot be loaded. No IMS database DL/I calls will be supported from stored procedures. Ensure the load module named AERTDLI is located in the partitioned dataset specified in the stored procedure address space startup procedure's DFSRESLB dd card statement.

**System Action:** The stored procedure address space initialization continues.

---

**DSNX991I**  
**csect-name** IMS ODBA INITIALIZATION COMPLETED

**Explanation:** The initialization of the IMS ODBA callable interface has completed. Stored procedure applications may use DL/I calls to access IMS databases.

**System Action:** The stored procedure address space initialization continues.

---

**DSNX992E**  
**csect-name** IMS ODBA INITIALIZATION FAILURE, AIB RC = rc

**Explanation:** The initialization of the IMS ODBA callable interface has failed. Stored procedure applications cannot use DL/I calls to access IMS databases.

**rc** The AIB return code provided by IMS for the CIMS INIT call. Refer to the section on DL/I Return and Reason Codes in IMS/ESA Application Programming: Database Manager for more information regarding the failure.

**System Action:** The stored procedure address space initialization continues.

---

**DSNX993I**  
**csect-name** CALL TO REXX PROCEDURE EXECNAME FAILED, FUNCTION = function RC = rc RSN = rsn

**Explanation:** An attempt to establish an environment to run a REXX stored procedure has failed. Use the following pieces of information to identify the error:

**execname** The name of the REXX executable.

**function** The TSO or REXX function call that failed. It can be one of three values: IKJTSOEV, IRXINIT, or IRXEXEC. For more information regarding the IKJTSOEV function, refer to OS/390 TSO/E Programming Services. For information regarding IRXINIT and IRXEXEC, refer to OS/390 TSO/E REXX Reference.

**rc** The return code for the specific function, provided by TSO or REXX. For return code explanations, refer to OS/390 TSO/E Programming Services and OS/390 TSO/E REXX Reference.

**reason** The reason code for the specified function, provided by TSO or REXX. For reason code explanations, refer to OS/390 TSO/E Programming Services and OS/390 TSO/E REXX Reference.

**System Action:** The stored procedure address space initialization continues.

---

**Problem Determination:** View the file associated with the SYSTSPRT DD card in the Stored Procedure Address Space start-up procedure. This file contains diagnostic messages issued by TSO regarding the failing function. Refer to OS/390 TSO/E Messages for any messages found in the SYSTSPRT.
DSNY... Messages

DSNY001I SUBSYSTEM STARTING
Explanation: The -START DB2 command is accepted. This message is issued to the MVS console that issued the -START command. The DSN9022I message is sent when the DB2 subsystem startup process has completed. Refer to the DSN9022I message for additional information.
System Action: DB2 startup processing begins.

DSNY002I SUBSYSTEM STOPPING
Explanation: The -STOP DB2 command is accepted. The DSN9022I message is issued when the DB2 subsystem shutdown process has completed. The message is issued either to the origin of the -STOP DB2 command (for MVS MCS console) or to the MVS console from which the -START DB2 command was received. Refer to the DSN9022I message for additional information.
System Action: DB2 subsystem shutdown is initiated.

DSNY003I SUBSYSTEM IS ALREADY ACTIVE
Explanation: The -START DB2 command has not been accepted, because the DB2 subsystem is active. The DSN9023I message is issued after this message. Refer to the DSN9023I message for additional information.
System Action: DB2 subsystem shutdown is continued.

DSNY004I SUBSYSTEM IS ALREADY STOPPING
Explanation: The -STOP DB2 command has not been accepted either because the DB2 subsystem shutdown is in progress for the specified option (QUIESCE or FORCE), or because the QUIESCE option was specified after a FORCE option had been previously accepted. The DSN9023I message is issued after this message. Refer to the DSN9023I message for additional information.
System Action: DB2 subsystem shutdown is terminated.

DSNY005I SUBSYSTEM STARTUP TERMINATED, INVALID START COMMAND
Explanation: The DB2 subsystem can be started only by a -START DB2 command.
System Action: DB2 subsystem startup is terminated.
Operator Response: Start the DB2 subsystem via the -START DB2 command, and reenter the rejected command.

DSNY006I csect-name INVALID AMODE OR RMODE ATTRIBUTE FOUND FOR LOAD MODULE module name
Explanation: The Initialization Procedures subcomponent detected that a module had an invalid AMODE or RMODE attribute when it was loaded. In the error message, 'module name' is the name of the load module with an invalid addressing or residency mode.
System Action: DB2 subsystem startup is terminated.
Operator Response: Notify the system programmer of the failure.

System Programmer Response: Verify that all installation and maintenance activities against DB2 were executed using SMP, that the JCLIN for SMP includes the correct AMODE and RMODE control statements, and that the Linkage Editor provided with the Data Facility Product (DFP) was invoked by SMP for the link edits. Correct the procedure or JCL that caused the error and rerun the necessary SMP jobs.
Problem Determination: A DB2 dump was requested to an MVS SYS1.DUMP data set. The MVS service aid AMBLIST provides Linkage Editor module attributes in the summary section of the LISTLOAD function output.

DSNY007I LOAD MODULE DSNHDECP DOES NOT HAVE RMODE(24) ATTRIBUTE
Explanation: The named load module was not link-edited with the required RMODE(24) attribute.
System Action: DB2 startup is abended with reason code 00E80160.
Operator Response: Notify the system programmer.
System Programmer Response: Verify that all installation and maintenance activities against DSNHDECP were executed using SMP. JCLIN for SMP must have included the correct AMODE and RMODE control statements. The Linkage Editor, provided with the Data Facility Product (DFP), was invoked by SMP for the link-edits. Correct the procedure or JCL that caused the error and rerun the necessary SMP jobs.
Problem Determination: The MVS service aid AMBLIST provides Linkage Editor module attributes in the summary section of the LISTLOAD function output.

DSNY008I SUBSYSTEM SHUTDOWN REQUEST NOT ACCEPTED
Explanation: The -STOP DB2 command has not been accepted because a subsystem startup has not completed to the point where shutdown can occur. The DSN9023I message is issued after this message. Refer to the DSN9023I message for additional information.
System Action: DB2 startup continues and the -STOP DB2 command is ignored.
User Response: Reissue the -STOP DB2 command after subsystem startup has completed.

DSNY009I LOAD MODULE module name IS NOT AT THE CORRECT RELEASE/VERSION LEVEL
Explanation: The named load module is not at the correct release/version level for the version of DB2 that was being started.
System Action: DB2 startup is abended with reason code 00E80161.
Operator Response: Notify the system programmer.
System Programmer Response: Verify that the correct load libraries are being used. Also verify that the application of maintenance did not result in modules being link edited into the wrong load libraries.
DSNY020I  csect-name MEASURED USAGE DATA IS NOT BEING RECORDED FOR subsystem/address-space

Explanation: For measured usage data to be recorded, SMF type 89 records must be collected. Two PTFs must be applied: one to the early code and one to the base. Until both are active, measured usage data cannot be recorded.

System Action: Processing continues, but measured usage for either the DB2 subsystem or the specified DB2 address space is not recorded.

Programmer Response: If measured usage data is needed, be sure that SMF type 89 records are collected and that both PTFs are applied to the running system. An IPL is required for the change to early code.

If the records are being recorded, the PTFs are applied, and an address-space is in the message, then the return code for the MVS service is located in ASCEMULC for that address space.
**DSNZ... Messages**

**DSNZ002I**  
**src DSNZINIT SUBSYSTEM ssnm SYSTEM PARAMETERS LOAD MODULE NAME IS dsnzparm-name**

**Explanation:** DB2 subsystem 'ssnm' is being started with the 'dsnzparm-name' DSNZPARM load module. This message is written to the MVS console which entered the -START DB2 command. The message will also appear in the JES SYSLOG and on the JES job log of ssnmMSTR. The message contains the name of the DSNZPARM load module entered by the operator or the default name (DSNZPARM) if no name was entered.

**System Action:** DB2 startup processing continues.

**DSNZ003I**  
**csect-name DSNZINIT CSECT parm-csect NOT FOUND IN SYSTEM PARAMETERS.**

**Explanation:** The named parm-csect was not found in the system parameters (ZPARM) specified when starting DB2. This CSECT is required to start DB2. The name of the system parameters load module that is missing this CSECT is identified in previously issued message DSNZ002I.

This error can occur if the system parameters load module specified is for a different release of DB2.

**System Action:** DB2 subsystem startup processing stops.

**Operator Response:** Verify that the correct system parameters name was specified. If the correct name was specified, notify the system programmer.

**System Programmer Response:** Verify that:

- The system parameters load module is for the release of DB2 being started.

- The correct load libraries are being used to load the system parameters load module.

If these are correct, then reassemble and relink-edit your system parameters load module.

**DSNZ004I**  
**csect-name DSNZINIT INCORRECT LEVEL wrong-level FOUND IN parm-csect SYSTEM PARAMETERS. LEVEL correct-level IS REQUIRED.**

**Explanation:** The system parameters load module CSECT parm-csect contains an incorrect level identifier. The CSECT contains a level identifier of wrong-level and the DB2 that is starting requires a level identifier of correct-level.

This error can occur if the system parameters load module specified is for a different release of DB2. This error can also occur if the system parameters load module is missing some maintenance. In this case the parm-csect is down level and must be reassembled.

**System Action:** DB2 subsystem startup processing stops.

**Operator Response:** Verify that the correct system parameters name was specified. If the correct name was specified, then notify the system programmer.

**System Programmer Response:** Verify that:

- The system parameters load module is for the release of DB2 being started.

- The correct load libraries are being used to load the system parameters load module.

If these are correct, then reassemble and relink-edit your system parameters load module.
DSN1... Messages

The messages in this section apply to DSN1LOGP, DSN1COPY, DSN1COMP, DSN1PRNT, and DSN1CHKR.

The value shown for 'severity' is the value returned as the job-stepcondition code from the job step in which the message is issued. If additional messages having higher severity values are issued during the same job step, the higher value is reflected as the job-step condition code.

Severity values have the following meanings:

0  An informational message. No error occurred.
4  A warning message. A condition was detected of which the user should be aware. The user might need to take further action.
8  An error message. An error situation was detected and processing could not continue.
12 A severe error message. A severe error situation was detected and processing could not continue.

---

**DSN110E  LIMIT OF 50 STATEMENTS EXCEEDED**

**Explanation:** DSN1LOGP allows a total of 50 statements for a given job.

**Severity:** 8 (error)

**System Action:** Processing is terminated.

**User Response:** Resubmit the job using no more than 50 statements.

---

**DSN111E  LIMIT OF 80 TOKENS EXCEEDED**

**Explanation:** DSN1LOGP allows a total of 80 keywords and corresponding value specifications. A keyword with its value is considered two tokens.

**Severity:** 8 (error)

**System Action:** Processing is terminated.

**User Response:** Resubmit the job using no more than 80 keywords.

---

**DSN112E  TOKEN xx..xx EXCEEDS 64 HEXADECIMAL CHARACTERS**

**Explanation:** The SYSIN input contains the character string 'xx..xx'. This string is invalid.

**Severity:** 8 (error)

**System Action:** Processing is terminated.

**User Response:** Resubmit the job with the specified token being no more than 64 hexadecimal characters in length.

---

**DSN113E  VALUE FOR KEYWORD xxxxxxxx INVALID**

**Explanation:** The SYSIN input contains the keyword 'xxxxxxx'. The value specified for that keyword is not of the form '( value )'.

**Severity:** 8 (error)

**System Action:** Processing is terminated.

**User Response:** Resubmit the job with the correct form of the keyword. The problem might be that the closing parenthesis ')' is missing or that an extra blank exists in the value.

---

**DSN114E  RBASTART MULTIPLY DEFINED**

**Explanation:** The RBASTART parameter can be specified only once for a given job.

**Severity:** 8 (error)

**System Action:** Processing is terminated.

**User Response:** Resubmit the job using a single RBASTART value.

---

**DSN115E  csect-name KEYWORD keyword ALLOWS ONLY number HEX CHARACTERS**

**Explanation:** The value given for keyword is too long.

**Severity:** 8 (error)

**System Action:** Processing is terminated.

**User Response:** Resubmit the job providing no more than the maximum number of characters allowed for the keyword.

---

**DSN116E  csect-name keyword IS USED MORE THAN ONCE.**

**Explanation:** The keyword can be used only once in a single job.

**Severity:** 8 (error)

**System Action:** Processing is terminated.

**User Response:** Resubmit the job providing a single keyword.

---

**DSN117E  csect-name keyword SPECIFIED WITH NO VALUE OR INCORRECT VALUE**

**Explanation:** The keyword must be followed by a correct value.

**Severity:** 8 (error)

**System Action:** Processing is terminated.

**User Response:** Resubmit the job providing a correct value for the keyword.
**DSN1118E RBAEND > 12 HEX CHARACTERS**

**Explanation:** The maximum size of a log RBA in DB2 is 6 bytes (hence, 12 characters).

**Severity:** 8 (error)

**System Action:** Processing is terminated.

**User Response:** Resubmit the job providing an RBAEND value that is no more than 12 hexadecimal characters.

**DSN1119E DBID MULTIPLY DEFINED**

**Explanation:** The DBID keyword can be specified only once for a given job.

**Severity:** 8 (error)

**System Action:** Processing is terminated.

**User Response:** Resubmit the job providing a single DBID value.

**DSN1120E DBID SPECIFIED WITH NO VALUE**

**Explanation:** The DBID keyword specifies a hexadecimal database identifier and must be followed by a value.

**Severity:** 8 (error)

**System Action:** Processing is terminated.

**User Response:** Resubmit the job providing a DBID (value).

**DSN1121E DBID > 4 HEX CHARACTERS**

**Explanation:** A DBID is 2 bytes in length (hence, 4 characters maximum).

**Severity:** 8 (error)

**System Action:** Processing is terminated.

**User Response:** Resubmit the job providing a DBID which is no longer than 4 hexadecimal characters.

**DSN1122E OBID MULTIPLY DEFINED**

**Explanation:** The OBID keyword can be specified only once for a given job.

**Severity:** 8 (error)

**System Action:** Processing is terminated.

**User Response:** Resubmit the job providing a single OBID value.

**DSN1123E OBID SPECIFIED WITH NO VALUE**

**Explanation:** The OBID keyword specifies a hexadecimal database object identifier. OBID must be followed by a value.

**Severity:** 8 (error)

**System Action:** Processing is terminated.

**User Response:** Resubmit the job providing an OBID (value).

**DSN1124E OBID > 4 HEX CHARACTERS**

**Explanation:** An OBID is 2 bytes in length (hence, 4 characters maximum).

**Severity:** 8 (error)

**System Action:** Processing is terminated.

**User Response:** Resubmit the job providing an OBID which is no longer than 4 hexadecimal characters.

**DSN1125E PAGE SPECIFIED WITH NO VALUE**

**Explanation:** The PAGE keyword specifies a hexadecimal page number. PAGE must be followed by a value.

**Severity:** 8 (error)

**System Action:** Processing is terminated.

**User Response:** Resubmit the job providing a PAGE (value).

**DSN1126E PAGE > 6 HEX CHARACTERS**

**Explanation:** A page number is 3 bytes in length (hence, 6 characters maximum).

**Severity:** 8 (error)

**System Action:** Processing is terminated.

**User Response:** Resubmit the job providing a PAGE value which is no longer than 6 hexadecimal characters.

**DSN1127E KEYWORD xxxxxxxx UNKNOWN**

**Explanation:** DSN1LOGP does not recognize the keyword ‘xxxxxxxx’.

**Severity:** 8 (error)

**System Action:** Processing is terminated.

**User Response:** Check to make sure all keywords are valid and resubmit the job.

**DSN1128E csect-name keyword KEYWORD SPECIFIED WITHOUT keyword**

**Explanation:** The identified keywords are associated with each other. You cannot specify one keyword without the other keyword.

**Severity:** 8 (error)

**System Action:** Processing is terminated.

**User Response:** Resubmit the job providing the corresponding correct keywords.

**DSN1129E PAGE WITHOUT DBID OBID**

**Explanation:** DB2 pages exist in objects called ‘page sets’. When you specify a page, you must also identify the page set by using the appropriate DBID and OBID specifications.

**Severity:** 8 (error)

**System Action:** Processing is terminated.

**User Response:** Resubmit the job providing the associated DBID (value) and OBID (value) that correspond to the given page.
DSN1130E  OBID WITHOUT DBID
Explanation: When you specify an OBID, you must also identify the database that contains that OBID by specifying the DBID of the database.
Severity: 8 (error)
System Action: Processing is terminated.
User Response: Resubmit the job providing both an OBID (value) and a DBID (value).

DSN1131E  OFFSET/VALUE PAIR NUMBER xx CONTAINS INVALID HEX DATA
Explanation: A hexadecimal specification is required. The value for offset/value pair number 'xx' contains an invalid hexadecimal character.
Severity: 8 (error)
System Action: Processing is terminated.
User Response: Resubmit the job providing a correct hexadecimal value specification.

DSN1132E  URID SPECIFIED WITH NO VALUE
Explanation: The URID keyword specifies the hexadecimal unit of recovery identifier. URID must be followed by a value.
Severity: 8 (error)
System Action: Processing is terminated.
User Response: Resubmit the job providing an associated value for the URID parameter.

DSN1133E  URID > 12 HEX CHARACTERS
Explanation: The maximum size of a URID in DB2 is 6 bytes (hence, 12 characters).
Severity: 8 (error)
System Action: Processing is terminated.
User Response: Resubmit the job providing a valid URID value of no more than 12 hexadecimal characters.

DSN1134E  csect-name LIMIT OF number keywords IS EXCEEDED
Explanation: The keyword was specified more than the maximum number of times allowed in any given job.
Severity: 8 (error)
System Action: Processing is terminated.
User Response: Resubmit the job specifying this keyword no more than the maximum number of times.

DSN1135E  SUMMARY MULTIPLY DEFINED
Explanation: The SUMMARY option can be specified only once.
Severity: 8 (error)
System Action: Processing is terminated.
User Response: Resubmit the job using a single SUMMARY specification.

DSN1136E  SUMMARY SPECIFIED WITH NO VALUE OR INCORRECT VALUE
Explanation: The permitted values for summary are YES, NO, ONLY, or FILTER.
Severity: 8 (error)
System Action: Processing is terminated.
User Response: Resubmit the job providing a valid parameter for the SUMMARY option.

DSN1137I  csect-name FIRST PAGE SET CONTROL RECORD AFTER RESTART LOG seq nnnnnnnnnnn
Explanation: This message shows the log sequence number of a record that serves as an implicit indication that a restart occurred just prior to this point.
seq RBA or LRSN
nnnnnnnnnn The log sequence number
Severity: 0 (informational)
System Action: Processing continues.

DSN1138E  csect-name keyword AND keyword CANNOT BOTH BE SPECIFIED
Explanation: You cannot specify both keywords in one job.
Severity: 8 (error)
System Action: Processing is terminated.
User Response: Resubmit the job specifying only one of the keywords.

DSN1139E  RID SPECIFIED WITH NO VALUE
Explanation: The RID keyword specifies a 4-byte hexadecimal number, with the first 3 bytes representing the page number and the last byte representing the record ID. A value must be associated with the RID.
Severity: 8 (error)
System Action: Processing is terminated.
User Response: Resubmit the job providing a valid RID (value).

DSN1140E  RID > 8 HEX CHARACTERS
Explanation: The maximum size of a RID in DB2 is 4 bytes (hence, 8 characters).
Severity: 8 (error)
System Action: Processing is terminated.
User Response: Resubmit the job providing a valid RID value of no more than 8 hexadecimal characters.

DSN1141E  RID WITHOUT DBID OBID
Explanation: The DBID and OBID associated with the given RID value must be specified.
Severity: 8 (error)
System Action: Processing is terminated.
User Response: Resubmit the job providing the associated DBID (value) and OBID (value) that correspond to the given RID value.
**Problem Determination:** Collect the following diagnostic items listed in [Appendix B, “Problem determination” on page 1051](#): 1, 2, 5.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** Collect the following diagnostic items listed in [Appendix B, “Problem determination” on page 1051](#): 1, 2, 5.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** Collect the following diagnostic items listed in [Appendix B, “Problem determination” on page 1051](#): 1, 2, 5.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** Collect the following diagnostic items listed in [Appendix B, “Problem determination” on page 1051](#): 1, 2, 5.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.
In-commit
Indoubt
Committed
Aborted
P-Abort

If the UR was bypassed by a conditional restart, DSN1LOGP indicates this by preceding the disposition value with the word BYPASSED.

The status of the data is one of the following:

- COMPLETE, indicating that all page sets modified by this UR were identified.
- PARTIAL, indicating that the list of page sets modified by this UR is incomplete. DSN1LOGP indicates PARTIAL status if all records associated with a UR are not available, and no checkpoint is found before the UR's completion.

- ss RBA of the first log record associated with the UR (that is, the URID).
- ee RBA of the last log record associated with the UR.
- rr LRSN of the first log record associated with the UR.
- nn LRSN of the last log record associated with the UR.
- nid The identifier assigned by IMS or CICS for this UR. This is blank if the UR is a result of TSO, batch, or remote access.
- luwid The logical unit of work identifier associated with the UR.
- name The name of the remote coordinator associated with the UR. This is blank if the coordinator is the local DB2, IMS, or CICS.
- list of participants The names of all remote participants that might have updated data in this UR.

This message is followed by messages that identify the page sets modified by the UR. For each page set, a single message is printed in the following form:

DATABASE=dbid=dbname
PAGE SET=obid=psname

Where:

dbid Internal database identifier
ddbname Database name corresponding to the dbid
obid Internal page set identifier
psname Page set name corresponding to the OBID

The dbname and psname fields might be absent if a full checkpoint was unavailable to DSN1LOGP or was caused by overlapped processing of DB2 during a checkpoint.

If no data was modified by the UR (for example, certain URs might be created merely to track information that is valid only for the life of the application), the phrase NO DATA MODIFIED is printed.

Severity: 0 (informational)

System Action: Processing continues.

### DSN1152I csect-name mbn UR CONNID=** CORRID=** AUTHID=** PLAN=** START DATE=** TIME=** DISP=xx INFO=** START TRBA=ss START LRSN=** END TRBA=ee END LRSN=nn NID=** ID=** LUWID=** COORDINATOR=** name PARTICIPANTS= (list of participants)

Explanation: This message describes a unit of recovery (UR) for data sharing member mbn. The UR identifying information (**) described in message DSN1151I is unavailable.

mbn MEMBER=membeaname, where membeaname is the member of a data sharing group. This is printed only for a data sharing record.

The remaining information (DISP, INFO, START, END, NID, LUWID, COORDINATOR and PARTICIPANTS) appears just as it does in message DSN1151I. If the UR did not complete, the END RBA or LRSN values are not printed.

This message is followed by messages that identify the page sets modified by the UR. Details of that are in the explanation of message DSN1151I.

Severity: 0 (informational)

System Action: Processing continues.

### DSN1153I csect-name CHECKPOINT mbn START TRBA=ss END TRBA=ee START LRSN=rr END LRSN=nn DATE=yy.ddd TIME=hh:mm:ss

Explanation: This message describes a complete checkpoint on the log starting and ending RBA or LRSN for data sharing member mbn. If the information is available, DSN1LOGP also returns the date and time that the checkpoint started.

When this message follows message DSN1157I RESTART SUMMARY, it identifies the checkpoint that would be used at restart. If no checkpoint is available, message DSN1158I is printed instead.

mbn MEMBER=membeaname, where membeaname is the member of a data sharing group. This is printed only for a data sharing record.

Severity: 0 (informational)

System Action: Processing continues.

### DSN1154I csect-name RESTART mbn AT RBA=xx LRSN=ll DATE=yy.ddd TIME=hh:mm:ss

Explanation: A normal restart occurred at log RBA xx or LRSN ll.

mbn MEMBER=membeaname, where membeaname is the member of a data sharing group. This is printed only for a data sharing record.

DSN1LOGP also returns the date and time of that restart.

Severity: 0 (informational)

System Action: Processing continues.
DSN1155I  csect-name CONDITIONAL RESTART  mbn AT
RBA=xx LRSN=ll DATE=yy.ddd TIME=hh:mm:ss
STARTRBA=ss ENDRBA=ee FORWARD=ff
BACKOUT=bb

Explanation: A conditional restart occurred at the log RBA xx
and LRSN ll. DSN1LOGP also returns the date and time of
that restart.

mbn  MEMBER=membername, where membername is
the member of a data sharing group. This is printed
only for a data sharing record.

ss  Relative byte address of the beginning of the restart

e  Relative byte address of the conclusion of the restart

ff  Whether forward log recovery phase was to be
bypassed (YES | NO)

bb  Whether backward log recovery phase was to be
bypassed (YES | NO)

Severity:  0 (informational)
System Action:  Processing continues.

DSN1156I  ALL URS COMPLETE

Explanation: There are no URs outstanding for restart.

Severity:  0 (informational)
System Action:  Processing continues.

DSN1157I  RESTART SUMMARY

Explanation: This message heads the summary of the
description of work to be performed at restart. Restart informa-
tion that follows is based on the scope of the log scanned. If
you suspect an error in DB2, refer to Section 3 of DB2 Diag-
nosis Guide and Reference for information on identifying and
reporting the problem.

Severity:  0 (informational)
System Action:  Processing continues.

DSN1158I  NO CHECKPOINT AVAILABLE — RESTART
SUMMARY INCOMPLETE

Explanation: No checkpoint is available within the scope of
the log scanned. The information following this message includes:

- URs that have not completed
- Page sets modified by these URs
- Page sets with writes pending.

The information cannot be considered complete.

Severity:  0 (informational)
System Action:  Processing continues.

DSN1159I  NO DATABASE WRITES PENDING

Explanation: All database I/O has been completed. If the Log
Extractor can find no complete checkpoint, it will return an
additional message '(BASED ON INCOMPLETE LOG
INFORMATION)', to warn you that there may in fact be
pending database writes.

Severity:  0 (informational)
System Action:  Processing continues.

DSN1160I  DATABASE WRITES PENDING:

Explanation: Database writes are pending at restart. Each
page set with outstanding I/O is identified by a separate
message following this one:

DATABASE=dbid=dbname
PAGESET=obid=psname START=ss

Where:

- dbid  Internal database identifier
- dbname Database name corresponding to the dbid
- obid  Internal page set identifier
- psname Page set name corresponding to the obid

Note: dbname and psname may be absent if a full
checkpoint was unavailable to the Log
Extractor or was caused by overlapped
processing of DB2 during a checkpoint.

ss  Log RBA of the earliest log record required to com-
plete outstanding writes for this page set. If the
value of ss is returned as **, this information is unav-
ailable. Such will be the case if the Log Extractor
is unable to locate a full checkpoint. In this event,
DSN1LOGP will return an additional message (LIST
MAY BE INCOMPLETE), to alert you to the possi-
bility that the list of page sets with outstanding
writes may be incomplete.

Severity:  0 (informational)
System Action:  Processing continues.

DSN1162I  csect-name  mbnUR CONNID=cc CORRID=bb
AUTHID=aa PLAN=pp START DATE=yy.ddd
TIME=hh:mm:ss DISP=xx INFO=ii
STARTRBA=ss STARTLRSN=ll
NID=nid LUWID=luwid COORDINATOR=name
PARTICIPANTS: (list of participants)

Explanation: This message describes a unit of recovery (UR)
that has not terminated. The information returned is the same
as for message DSN1151I, except that the END field is not
included in the message because the UR did not terminate.

mbn  MEMBER=membername, where membername is
the member of a data sharing group. This is printed
only for a data sharing record.

Severity:  0 (informational)
System Action:  Processing continues.

DSN1163E  NO CHECKPOINT AVAILABLE DUE TO LOG
ERROR — RESTART SUMMARY INCOMPLETE

Explanation: A log error was encountered. DSN1LOGP
marked any checkpoints encountered before the log error as
invalid. There were no complete checkpoints following the log
error in the specified log range. The information following this
message includes:

- URs that have not completed
- Page set modified by these URs
- Page sets with writes pending.

This information cannot be considered complete.

Severity:  0 (informational)
System Action:  Processing continues.
Explanation: While processing the SUMMARY option, an invalid checkpoint record (either URE or RURE identified by 'xxxx') was encountered in the log.

Severity: 0 (informational)

System Action: Processing continues.

User Response: If the checkpoint record identified in the message is used to restart DB2, the restart will fail because DB2 will not be able to process the unit of recovery presented by the invalid URE or RURE. DB2 must be restarted from a previous checkpoint to correctly process all units of recovery. The print log map (DSNJU004) utility can be used to list the checkpoint records in the BSDS, and the CHKPTRBA parameter of the change log inventory (DSNJU003) utility can be used to direct the DB2 restart to use a particular checkpoint.

Explanation: The SUBTYPE parameter can be specified only once for any given job.

Severity: 12 (severe error)

System Action: Processing terminates.

User Response: Provide a single SUBTYPE value and resubmit the job.

Explanation: The SUBTYPE parameter specifies a decimal set subtype. The SUBTYPE must be followed by a value, i.e. SUBTYPE(value).

Severity: 12 (severe error)

System Action: Processing terminates.

User Response: Provide a SUBTYPE value and resubmit the job.

Explanation: The maximum size for an OFFSET is 4 bytes (hence, 8 characters).

Severity: 12 (severe error)

System Action: Processing terminates.

User Response: Provide an OFFSET with a maximum of 8 characters and resubmit the job.

Explanation: A maximum of 10 OFFSET, VALUE pairs can be specified for a given log record SUBTYPE.

Severity: 12 (severe error)

System Action: Processing terminates.

User Response: Provide a maximum of 10 OFFSET, VALUE pairs for a given SUBTYPE and resubmit the job.

Explanation: The specified keyword value is not valid.

Severity: 12 (severe error)

System Action: Processing terminates.

User Response: Refer to DB2 Utility Guide and Reference for a list of valid values. Provide a valid value and resubmit the job.

Explanation: The given OFFSET has no corresponding SUBTYPE.

Severity: 12 (severe error)

System Action: Processing terminates.

User Response: Provide a valid SUBTYPE for the given OFFSET and resubmit the job.

Explanation: The given OFFSET has no corresponding VALUE given or an incorrect VALUE is specified, such as specifying another keyword in place of a value.

Severity: 12 (severe error)

System Action: Processing terminates.

User Response: Provide a valid VALUE for the given OFFSET and resubmit the job.

Explanation: The given OFFSET has no corresponding VALUE keyword specified.

Severity: 12 (severe error)

System Action: Processing terminates.

User Response: Provide an associated VALUE (value) for the given OFFSET and resubmit the job.
**DSN1179E**  VALUE SPECIFIED WITH NO CORRESPONDING OFFSET OR SUBTYPE PARAMETER

**Explanation:** The given VALUE has either no corresponding OFFSET or SUBTYPE parameter specified.

**Severity:** 12 (severe error)

**System Action:** Processing terminates.

**User Response:** Provide an associated OFFSET or SUBTYPE for the given VALUE and resubmit the job.

**DSN1180E**  VALUE SPECIFIED WITH NO VALUE OR INCORRECT VALUE

**Explanation:** The given VALUE has no corresponding value given, an incorrect value is specified, such as specifying a keyword in place of a value, or an uneven number of characters were specified.

**Severity:** 12 (severe error)

**System Action:** Processing terminates.

**User Response:** Provide a valid VALUE for the given VALUE and resubmit the job.

**DSN1181E**  VALUE SPECIFIED WITH NO CORRESPONDING OFFSET

**Explanation:** The given VALUE has no corresponding OFFSET specified.

**Severity:** 12 (severe error)

**System Action:** Processing terminates.

**User Response:** Provide a valid OFFSET for the given VALUE and resubmit the job.

**DSN1182E**  LIMIT OF 10 LUWIDs EXCEEDED

**Explanation:** A maximum of 10 LUWID keywords can be specified in any given job.

**Severity:** 8 (error)

**System Action:** DSN1LOGP processing is terminated.

**User Response:** Resubmit the job providing no more than 10 LUWID keywords.

**DSN1183E**  LUWID SPECIFIED WITH INCORRECT VALUE OR NO VALUE

**Explanation:** The LUWID consists of an LU network name, an LUW instance number, and a commit sequence number. The LU network name consists of a 1 to 8 character network ID, a period, and a 1 to 8 character network LU name. The LUW instance number consists of a period followed by 12 hexadecimal characters. The LUW sequence number consists of a period followed by 4 hexadecimal characters.

**Severity:** 8 (error)

**System Action:** DSN1LOGP processing is terminated.

**User Response:** Resubmit the job providing a valid LUWID value.

**DSN1184E**  FILTER KEYWORD MULTIPLY DEFINED

**Explanation:** The FILTER keyword was specified more than once.

**Severity:** 8 (error)

**System Action:** DSN1LOGP processing is terminated.

**User Response:** Correct the input to provide only one FILTER keyword and resubmit the job.

**DSN1185E**  FILTER KEYWORD SPECIFIED WITHOUT SUMMARY KEYWORD

**Explanation:** The FILTER keyword was specified without an associated SUMMARY keyword.

**Severity:** 8 (error)

**System Action:** DSN1LOGP processing is terminated.

**User Response:** Correct the input to include the SUMMARY keyword and resubmit the job.

**DSN1210E**  DSNJSLR ERROR RETCODE=xxxxxxxx REASON CODE =yyyyyyyy

**Explanation:** The stand-alone log read function detected an error. The return code (RETCODE) is explained in Appendix C (Volume 2) of *DB2 Administration Guide*. The reason code is explained in "Section 4. DB2 Codes" on page 577.

**Severity:** 8 (error)

**System Action:** Processing is terminated.

**DSN1211E**  DSNJSLR RETURNED BAD LOG RBA

**Explanation:** One of the three problems listed below exists.

1. The recovery log data set is damaged.
2. You identified a data set that isn't a recovery log data set.
3. The stand-alone log read service has a problem.

**Severity:** 0 (informational)

**System Action:** Processing continues.

**User Response:** Determine if the problem is your error by dumping the data set and determining if it is a log data set.

**Problem Determination:** A common error is to specify the first data set on an archive tape (the 'Bxxxxxxx' data set) as a log data set; it is actually a BSDS.

**DSN1212I**  csect-name FIRST LOG seq ENCLOSED nnnnnnnnnnn

**Explanation:** This message identifies the sequence number of the first log record that was read.

**seq** RBA or LRSN

**Severity:** 0 (informational)

**System Action:** Processing continues.

**DSN1213I**  csect-name LAST LOG seq ENCLOSED nnnnnnnnnnn

**Explanation:** This message identifies the sequence number of the last log record that was read.

**seq** RBA or LRSN

**Severity:** 0 (informational)
DSN1214I  NUMBER OF LOG RECORDS READ 
nnnnnnnnnnnnnn
Explanation: This identifies the number (in decimal) of 'logical' log records read during DSN1LOGP processing.
Severity: 0 (informational)
System Action: Processing continues.

DSN1215I  NO LOG RECORDS WERE READ
Explanation: DSN1LOGP read no log records.
Severity: 0 (informational)
System Action: Processing continues. Possible explanations:
• An error prevents DSN1LOGP from continuing, so no log records have yet been processed. If this is the case, an error message should precede this message.
• You specified the active log data sets or archive log data sets out of RBA sequence.
• You specified a STARTRBA that is greater than any RBA in the active and/or archive data sets available.

DSN1216E  csect-name DSNJSLR ERROR RETCODE = xxxxxxxx REASON CODE = yyyyyyyy seq = nnnnnnnnnnnn
Explanation: The stand-alone log read function returned an error indicating that either the log has an error in one of the control intervals (CI) or a data set containing the requested sequence number cannot be located. The sequence number shown in the message indicates where the error was detected.
seq RBA or LRSN
The sequence number points:
• To the start of the CI, if there is a problem with the log control interval definition (LCID), or with any of the general control information within a CI.
• To the log record in the CI, if there is a problem with a log record header (LRH).
If this is the first log record read during this execution of DSN1LOGP, and if there is a problem with the LCID, the sequence number is all zeros.
Before returning any records, DSN1LOGP checks the control information (LCID) at the end of a CI, and analyzes the LRH to ensure that all records are properly chained together within the CI. If an error is detected while performing this process, DSN1LOGP issues this message before dumping the entire CI. It will not format individual records within the CI, but will, if possible, continue processing by reading the next CI.
Severity: 0 (informational)
System Action: Processing continues.

DSN1217E  csect-name mbn DSNJSLR WARNING RETCODE = xxxxxxxx REASON CODE = yyyyyyyy CURRENT LOG seq = nnnnnnnnnnnn
Explanation: A gap in the log sequence range was encountered for member mba. The CURRENT LOG sequence number shows the log record for the member following the gap, and is formatted following this message.
Previous log record can be found with same member ID.
mbn MEMBER=membername, where membername is the member of a data sharing group. This is printed only for a data sharing record.
seq RBA or LRSN
Severity: 0 (informational)
System Action: Processing continues.

Problem Determination: The reason code identifies the nature of the error and is explained in [Section 4. DB2 Codes] on page 577. The return code is explained in Appendix C (Volume 2) of DB2 Administration Guide.

DSN1218I  NUMBER OF LOG ERROR MESSAGES 
nnnnnnnnnnnnnnn
Explanation: DSN1LOGP distinguishes three classes of errors:
1. Code problems existing in the DB2 or system code used for DSN1LOGP. In the event of a SYSABEND dump, a user abend code of U0153 will be issued, and DSN1LOGP will be terminated.
2. Incorrect invocation of DSN1LOGP caused, perhaps, by your having used an incorrect keyword or missed a DD statement. Under these circumstances, DSN1LOGP will issue appropriate error messages, and the program will be terminated.
3. Failure by a given log CI under the scrutiny of DSN1LOGP. Such scrutiny is performed before any of the records within the CI are processed. Failure is an indication of logical damage, and error messages are issued by the Log Extractor. The CI or failing log record is printed, and DSN1LOGP continues to the next CI or log record.
The count ‘nnnnnnnnnnnnn’ provided summarizes the number (in decimal) of errors DSN1LOGP detected while accessing the log.
Severity: 0 (informational)
System Action: Processing continues.

DSN1219E  SYSSUMRY DD STATEMENT MISSING
Explanation: You requested the SUMMARY option, but failed to include the SYSSUMRY DD statement in your JCL invocation.
Severity: 8 (error)
System Action: Processing terminates.
User Response: Resubmit the job with a SYSSUMRY DD statement included in the JCL invocation.
DSN1220E • DSN1702E

DSN1220E
ARCHIVE LOG TRUNCATED AT xxxxxxx - INVALID LOG RECORDS WERE READ

Explanation: At a restart of DB2, an archive log was truncated. This archive log data set could not be physically altered to reflect this truncation, and invalid log records therefore still exist. DSN1LOGP has already reported this information in the summary report, and cannot retract it. Nor can it disregard the invalid log information already read in order adequately to summarize what has occurred. Therefore, all information up to this point in the log will be summarized, and a new summary report initiated. Consequently, the same UR may be reported twice with different dispositions and different page sets modified. To avoid this condition, use the BSDS DD statement instead of the ARCHIVE DD statement.

Severity: 0 (informational)

System Action: Processing continues.

DSN1221E DSNJSLR ERROR RETCODE=xxxxxxxx
REASON CODE=yyyyyyyy VSAM RETURN CODE=aaaa ERROR CODE=bbbb

Explanation: The stand-alone log read function resulted in a VSAM error. The DSNJSLR return code ‘xxxxxxx’, and reason code ‘yyyyyyyy’, included in the message are documented in Appendixes (Volume 2) of DB2 Administration Guide.

The VSAM return code (aaaa), and error code (bbbb), identify the nature of the VSAM error. Refer to the appropriate VSAM publication for an explanation of these codes.

Severity: 0 (informational)

System Action: Processing continues.

DSN1222E DSNJSLR ERROR RETCODE=xxxxxxxx
REASON CODE=yyyyyyyy DYNAMIC ALLOCATION INFORMATION CODE=aaaa ERROR CODE=bbbb

Explanation: An error occurred while dynamically allocating a log data set. DSNJSLR return code ‘xxxxxxx’, and reason code ‘yyyyyyyy’, included in the message are documented in Appendixes (Volume 2) of DB2 Administration Guide. Information code ‘aaaa’ and error code ‘bbbb’ were returned by the dynamic allocation SVC and identify the nature of the error. Refer to the appropriate MVS publication for an explanation of these codes.

Severity: 12 (severe error)

System Action: Processing terminates.

DSN1223E DSNJSLR ERROR RETCODE=xxxxxxxx
REASON CODE=yyyyyyyy RDJFCB RETURN CODE=aaaa

Explanation: An error occurred while trying to read the job file control block. The DSNJSLR return code ‘xxxxxxx’, and reason code ‘yyyyyyyy’, included in the message are documented in Appendixes (Volume 2) of DB2 Administration Guide.

The RDJFCB return code (aaaa), identifies the nature of the error. Refer to the appropriate MVS publication for an explanation of these codes.

Severity: 0 (informational)

System Action: Processing continues.

DSN1300E csect-name RBA RANGE CANNOT BE USED TO PRINT LOG RECORDS FROM MULTIPLE DB2 SYSTEMS

Explanation: RBASTART and RBAEND cannot be used to define the range when selecting log records from multiple DB2 systems. LRSNSTART and LRSNEND should be used instead.

System Action: Processing terminates.

User Response: Resubmit the job with either RBA values only or LRSN values only.

DSN1303E csect-name INCOMPATIBLE DD STATEMENTS WERE SPECIFIED FOR LOG PROCESSING

Explanation: Either MxxACTn or MxxARCHV was erroneously specified in conjunction with MxxBSDS to locate the log data sets of a member of a DB2 data sharing group for a DSN1LOGP job.

System Action: Processing terminates.

User Response: Correct the DD statement and resubmit the job.

DSN1309E csect-name SPECIFIED END RANGE IS LESS THAN START RANGE

Explanation: The value specified for ENDRLSN or ENDRBA is less than the value of STARTRLSN or STARTRBA for a DSN1LOGP job.

System Action: Processing terminates.

User Response: Resubmit the job with correct start and end values.

DSN1700E VALUE FOR KEYWORD xxxxxxxx IS INVALID

Explanation: The SDMPIN input contains the ‘xxxxxxx’. The value specified for that keyword is invalid.

Severity: 8 (error)

System Action: Processing is terminated.

User Response: Provide a correct keyword value and resubmit the job.

DSN1701E START TRACE MISSING

Explanation: The START TRACE command is required. The first keyword record of the SDMPIN input does not contain a START TRACE command.

Severity: 8 (error)

System Action: Processing is terminated.

User Response: Resubmit the job with START TRACE as the first keyword record in the SDMPIN input.

DSN1702E KEYWORD xxxxxxxx MULTIPLY DEFINED

Explanation: Keyword ‘xxxxxxx’ was specified multiple times in the SDMPIN input. All keywords are allowed only once.

Severity: 8 (error)

System Action: Processing is terminated.

User Response: Specify the keyword only once. Resubmit the job.
DSN1703E  KEYWORD xxxxxxxx UNKNOWN
Explanation:  DSN1SDMP does not recognize the keyword 'xxxxxxxx'.
Severity:  8 (error)
System Action:  Processing is terminated.
User Response:  Make sure that all keywords are valid and then resubmit the job.

DSN1704E  UNABLE TO OBTAIN RETURN-AREA STORAGE
Explanation:  An error resulted when DSN1SDMP attempted to obtain storage for an instrumentation facility interface (IFI) return area.
Severity:  8 (error)
System Action:  Processing is terminated.
User Response:  When you resubmit the job either:
  • Specify a larger region size in the job control language.
  • Reduce the value of BUFSIZE on START TRACE.

DSN1705E  SYNTAX ERROR, LINE = ll, COLUMN = cc
Explanation:  A syntax error was encountered in the SDMPIN input. The location of the error is given by:
ll  The line number within the input stream that is in error.
cc  The column number.
Severity:  8 (error)
System Action:  Processing is terminated.
User Response:  Correct the syntax error and then resubmit the error.

DSN1706E  INVALID ABEND CODE SPECIFIED
Explanation:  An invalid abend code was specified on the ACTION keyword.
Severity:  8 (error)
System Action:  Processing is terminated.
User Response:  Allowable abend codes are 00E60100 through 00E60199. Specify an allowable abend code and then resubmit the job.

DSN1707E  LIMIT OF 50 STATEMENTS EXCEEDED
Explanation:  DSN1SDMP allows a maximum of 50 statements for a given job.
Severity:  8 (error)
System Action:  Processing is terminated.
User Response:  Use no more than 50 statements when you resubmit the job.

DSN1708E  TOO MANY SELECT CRITERIA VALUES
Explanation:  DSN1SDMP allows a maximum of eight SELECT criteria values.
Severity:  8 (error)
System Action:  Processing is terminated.
User Response:  Use no more than eight SELECT criteria values and then resubmit the job.

DSN1709E  INPUT/OUTPUT ERROR, DDNAME=xxxxxxxx
Explanation:  An error resulted when DSN1SDMP attempted to do I/O. The ddname of the data set to which I/O failed is 'xxxxxxxx'
Severity:  8 (error)
System Action:  Processing is terminated.
User Response:  Ensure that the 'xxxxxxxx' DD statement in the job control language is valid and resubmit the job.

DSN1710E  UNABLE TO OPEN SDMPTRAC
Explanation:  An error resulted when DSN1SDMP attempted to open the SDMPTRAC data set.
Severity:  8 (error)
System Action:  Processing is terminated.
User Response:  Ensure that the SDMPTRAC DD statement in the job control language is valid and resubmit the job.

DSN1711E  START TRACE ERROR, REASON=xxxxxxxx
Explanation:  DB2 did not process the submitted START TRACE command. The reason code 'xxxxxxxx' is returned from the instrumentation facility interface (IFI).
Severity:  8 (error)
System Action:  Processing is terminated.
User Response:  Check the return area that follows message DSN1712I. Possible problems are:
  • The syntax of the START TRACE command is invalid. Correct the command and resubmit the job. Do not include the subsystem recognition character before the command text.
  • The user does not have authority to issue trace commands. Obtain trace authority and resubmit the job.

DSN1712I  START TRACE RETURN-AREA FOLLOWS:
Explanation:  DSN1SDMP issued the START TRACE command and the return area resulting from the instrumentation facility interface (IFI) COMMAND call follows this message. The return area contains DB2 command response messages.
Severity:  0 (informational)
System Action:  Processing continues.
DSN1713I READA ERROR, REASON=xxxxxxxx
Explanation: An error resulted when DSN1SDMP issued a instrumentation facility interface (IFI) READA call in an attempt to obtain DB2 trace records. Reason code 'xxxxxxxx' is the IFI reason code returned in IFCARC2.
Severity: 0 (informational)
System Action: DSN1SDMP writes any records that were returned and processing continues.
User Response: Possible reason codes are:

00E60802 The DSN1SDMP return area was not large enough to hold the returned trace records. This condition should not occur because the DSN1SDMP return area is the same size as the requested OPn monitor buffer.

00E60803 No trace data was available when the READA request was made. This condition occurs when the trace started by DSN1SDMP is stopped from the operator console or by another application program.

DSN1714I TRACE RECORDS WERE LOST
Explanation: DB2 trace records were lost and are not contained in the SDMPTRAC data set.
Severity: 0 (informational)
System Action: Processing continues.
User Response: Possible reasons for lost trace records are:

- The OP buffer is not large enough. Specify a larger BUFSIZE on the START TRACE command and then resubmit the job.
- The trace data is too voluminous and buffer is overflowing before the data can be read. Specify a more granular selectivity on the START TRACE command and then resubmit the job.

DSN1715E UNABLE TO OBTAIN WORK SPACE
Explanation: An error resulted when DSN1SDMP attempted to obtain work area storage.
Severity: 8 (error)
System Action: Processing is terminated.
User Response: Specify a larger region size in the job control language and then resubmit the job.

DSN1716E UNABLE TO OPEN SDMPIN
Explanation: An error resulted when DSN1SDMP attempted to open the SDMPIN data set.
Severity: 8 (error)
System Action: Processing is terminated.
User Response: Ensure that the SDMPIN DD statement in the job control language is valid and resubmit the job.

DSN1717I STOP TRACE RETURN-AREA FOLLOWS:
Explanation: DSN1SDMP issued the STOP TRACE command and the return area resulting from the instrumentation facility interface (IFI) COMMAND call follows this message. The return area contains DB2 command response messages.
Severity: 0 (informational)
System Action: Processing continues.

DSN1717I STOP TRACE ERROR, REASON=xxxxxxxx
Explanation: DSN1SDMP attempted to submit a DB2 STOP TRACE command at the end of its processing; however, the command failed. The reason code returned from the instrumentation facility interface (IFI) is 'xxxxxxxx'.
Severity: 8 (error)
System Action: Processing is terminated.
User Response: Check the return area that follows message DSN1717I. One possible problem is:

- The trace has already been stopped from the operator's console or by another application program.

DSN1719I ACTIONS ARE COMPLETE
Explanation: All requested IFC selective dump actions finished. All trace records have been written to the specified destination(s). If an abend action was requested, all abends have taken place.
Severity: 0 (informational)
System Action: DSN1SDMP stops the trace that it started and completes processing.

DSN1720I READA ERROR, REASON=xxxxxxxx
Explanation: An error resulted when DSN1SDMP issued a instrumentation facility interface (IFI) READA call in an attempt to obtain DB2 trace records. Reason code 'xxxxxxxx' is the IFI reason code returned in IFCARC2.
Severity: 8 (error)
System Action: Processing is terminated.
User Response: One possible reason code is:

00E60824 The user does not have correct monitor authority. Obtain the correct monitor authority (MONITOR1 or MONITOR2) and resubmit the job.

DSN1800I START OF DSN1CHKR FOR JOB job-name step-name
Explanation: This message indicates that DSN1CHKR started processing.
Severity: 0 (informational)
System Action: DSN1CHKR starts processing.
DSN1801I ANCHOR POINT mm IN ERROR IN PAGE nnnnnn

Explanation: This message indicates that anchor point ‘mm’ is in error in page ‘nnnnnn’. Either the backward pointer is not zero when the forward pointer is zero, or the backward pointer does not point to the last record ID in the parent chain. If this message is preceded by DSN1835I then the child pointer is pointing to a page beyond the high used RBA of the data set. Either the child pointer is invalid or the data set has been truncated.

Severity: 4 (warning)

System Action: The page is marked for output if the FORMAT/DUMP option is in effect. Processing continues.

Problem Determination: Contact your IBM Support Center for assistance.

DSN1802I RING/LINK CHAIN BROKEN - type RID = nnnnnnnn

Explanation: This message indicates that there is a broken ring or link chain beginning at ‘type’ (anchor or parent) with record id equal to ‘nnnnnnnn’. This is one of a series of messages associated with a broken ring or link. It will appear in combination with DSN1803I, DSN1804I, and DSN1805I.

Severity: 4 (warning)

System Action: The page is marked for output if the FORMAT/DUMP option is in effect. Processing continues.

Problem Determination: Contact your IBM Support Center for assistance.

DSN1803I PARENT RID = nnnnnnnn

Explanation: This message supplies the record id ‘nnnnnnnn’ for the parent record of a detected broken ring or link. This is one of a series of messages associated with a broken ring or link. It will appear in combination with DSN1802I, DSN1804I, and DSN1805I.

Severity: 4 (warning)

System Action: Processing continues.

Problem Determination: Contact your IBM Support Center for assistance.

DSN1804I CURRENT RID = nnnnnnnn

Explanation: This message supplies the record id ‘nnnnnnnn’ for the current record at the time the broken ring or link was detected. This is one of a series of messages associated with a broken ring or link. It will appear in combination with DSN1802I, DSN1803I, and DSN1805I.

Severity: 4 (warning)

System Action: Processing continues.

Problem Determination: Contact your IBM Support Center for assistance.

DSN1805I PREVIOUS IN CHAIN = nnnnnnnnn

Explanation: This message supplies the record id ‘nnnnnnnnnn’ of the record prior to when the broken ring or link was detected. This is one of a series of messages associated with a broken ring or link. It will appear in combination with DSN1802I, DSN1803I, and DSN1804I.

Severity: 4 (warning)

System Action: Processing continues.

Problem Determination: Contact your IBM Support Center for assistance.

DSN1806I IDMAP ENTRY entry-number IN PAGE page-number IS IN ERROR

Explanation: This message indicates that the IDMAP entry ‘entry-number’ in page ‘page-number’ is not valid. Valid entries are from X’0014’ to X’0Fhh’ (depending on the number of IDMAP entries in the page).

Severity: 4 (warning)

System Action: The page is marked for output if the FORMAT/DUMP option is in effect. Processing continues.

Problem Determination: Contact your IBM Support Center for assistance.

DSN1807I CHILD POINTER chd-rid IN ERROR IN PARENT RECORD par-rid IN PAGE pppppp

Explanation: This message indicates that the parent record with record ID ‘par-rid’ in page ‘pppppp’ has a child pointer with an invalid record ID of ‘chd-rid’. If this message is preceded by DSN1835I, then the child pointer is pointing to a page beyond the high used RBA of the data set. Either the child pointer is invalid or the data set has been truncated.

Severity: 4 (warning)

System Action: The page is marked for output if the FORMAT/DUMP option is in effect. Processing continues.

Problem Determination: Contact your IBM Support Center for assistance.

DSN1808I OVERFLOW RECORD IN ERROR - OVERFLOW RID = ovf-rid, POINTER RID = ptr-rid

Explanation: This message indicates that the record at record ID ‘ovf-rid’, pointed to by the pointer record at record ID ‘ptr-rid’, is not an overflow record.

Severity: 4 (warning)

System Action: The page is marked for output if the FORMAT/DUMP option is in effect. Processing continues.

Problem Determination: Contact your IBM Support Center for assistance.
DSN1809I • DSN1811I
DSN1809I OVERFLOW RECORD IN ERROR - OVERFLOW RID = ovf-rid, HAS NO POINTER RECORD
Explanation: This message indicates no pointer record points to the overflow record with record id 'ovf-rid'.
Severity: 4 (warning)
System Action: The page is marked for output if the FORMAT/DUMP option is in effect. Processing continues.
Problem Determination: Contact your IBM Support Center for assistance.

DSN1810I INPUT DATA SET INVALID, NOT A CHECKABLE SYSTEM TABLESPACE
Explanation: This message indicates that the data set defined by SYSUT1 is not a checkable table space and therefore cannot be analyzed.
Severity: 8 (error)
System Action: Processing terminates.
System Programmer Response: Correct the SYSUT1 DD statement and rerun the job.
Problem Determination: Checkable system table spaces must be referenced by a hashed entry or contain links. Single-record table spaces referenced by an index are not checkable. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

DSN1811I ANCHOR POINT PAGE page IS OUT OF RANGE — VALUE IS LESS THAN 2 OR GREATER THAN ‘E’X
Explanation: The ANCHOR function has an incorrect page value for the page-slot argument. Anchor points can be found only on pages 2 through 14 (E in hexadecimal). Any anchor point page specified beyond that range is invalid.
Severity: 4 (warning)
System Action: Processing continues with the next set of parameters.

DSN1812I ORPHAN ID = orph-id ID ENTRY = entry-val FOUND IN PAGE page-number
Explanation: This message indicates that the record with id = 'orph-id' and id entry = 'entry-val' in page 'page-number' is an orphan.
Severity: 4 (warning)
System Action: Processing continues.
Problem Determination: Contact your IBM Support Center for assistance.

DSN1813I UNABLE TO DUMP PAGE page-number
Explanation: An error was encountered while retrieving the page and therefore page 'page-number' could not be dumped.
Severity: 4 (warning)
System Action: Processing continues.
Problem Determination: Examine previous diagnostic and system messages, correct problem, and rerun job.

DSN1814I UNEXPECTED END OF DATA AT PAGE page-number
Explanation: The END-OF-DATA condition was reached before expected at page 'page-number'.
Severity: 8 (error)
System Action: Processing terminates.
Problem Determination: Examine previous diagnostic and system messages, correct problem and rerun job.

DSN1815I DSN1CHKR COMPLETED SUCCESSFULLY, pg-cnt PAGES PROCESSED
Explanation: This message indicates the DSN1CHKR successfully completed processing; all checks completed. The 'pg-cnt' represents the number of pages read during check processing, not the number of pages in the table space.
Severity: 0 (informational)
System Action: Processing terminates.

DSN1816I DSN1CHKR TERMINATED WITH ERRORS, pg-cnt PAGES PROCESSED
Explanation: This message indicates the DSN1CHKR did not successfully complete processing. The 'pg-cnt' represents the number of pages read during check processing, not the number of pages in the table space.
Severity: 4 (warning) or 8 (error)
System Action: Processing terminates.
Problem Determination: Examine previous diagnostic messages, correct problems if possible and rerun job. Otherwise contact your IBM Support Center for assistance.

DSN1817I ARGUMENT arg-val OF THE MAP COMMAND IS INVALID
Explanation: This message indicates that the argument 'arg-val' of the MAP command is invalid.
Severity: 8 (error)
System Action: Processing terminates.
Problem Determination: Refer to DB2 Utility Guide and Reference for the correct syntax.
Examples of invalid arguments are:
- The offset value of the ANCHOR or HASH option is neither zero (0) nor four (4).
- When the ANCHOR and RID option has been specified, the page number specified is less than two, which would be a nondata page.

DSN1818I IDMAP ENTRY entry-number IN PAGE page-number IS BEING USED BY MULTIPLE CHAINS - ONE OF WHICH IS IN ERROR
Explanation: This message indicates that a record is part of two different chains and therefore creates an invalid structure within the table space. If using the MAP option, the mapping of the chain stops since the path back to the starting record is lost.
Severity: 4 (warning)
System Action: Processing continues.
Problem Determination:  Contact your IBM Support Center for assistance.

DSN1819I  HASH VALUE FOR dbid CORRESPONDS TO:
PAGE = page-number AND ANCHOR POINT
OFFSET = offset
Explanation:  This message indicates that the page value
'page-number' is the page and 'offset' is the anchor point.
Severity:  0 (informational)
System Action:  Processing continues.

Problem Determination:  Refer to DB2 Command Reference
for the correct syntax.

DSN1820I  MAPPING OF map-opt (val1,val2) HAS COMPLETED
Explanation:  This message indicates that mapping of the
indicated option 'map-opt', which is either ANCHOR, HASH,
PAGE or RID, has started. The option's arguments, 'val1' and
'val2' will also be mapped. Following this message will be the
records of the chain.
Severity:  0 (informational)
System Action:  Processing continues.

DSN1821I  MAPPING OF 'map-opt' (val1,val2) HAS COMPLETED
Explanation:  This message indicates that mapping of the
indicated option 'map-opt', which is either ANCHOR, HASH,
PAGE, or RID, started. The option's arguments, 'val1' and
'val2' will also be mapped. Preceding this message will be the
records of the chain.
Severity:  0 (informational)
System Action:  Processing continues.

DSN1822I  DBID dbid HASHED TO AN EMPTY ANCHOR
POINT - NO ENTRIES FOR THE GIVEN DBID
ARE AVAILABLE IN THE TABLESPACE
Explanation:  DBID 'dbid' hashed to an empty anchor point. An
anchor point with a value of 0 (empty) means that no
entries are available in the table space. Therefore, no links
are checked.
Severity:  4 (warning)
System Action:  Processing continues with the next set of
parameters.

DSN1823I  INVALID SYNTAX, c EXPECTED
Explanation:  This message indicates that an unexpected
character was found while parsing the parmlist and that 'c'
was the expected character.
Severity:  8 (error)
System Action:  Processing terminates.

Problem Determination:  Refer to DB2 Command Reference
for the correct syntax.

DSN1824I  INVALID HEX DATA: hex-data
Explanation:  This message indicates that the input value
'hex-data' is not a valid hexadecimal number.
Severity:  8 (error)
System Action:  Processing terminates.

Problem Determination:  Correct input value and rerun job.

DSN1825I  INPUT VALUE EITHER TOO LONG OR
OMITTED: in-val
Explanation:  This message indicates that the input value
'in-val' is either greater than 8 hexadecimal digits or was
totally omitted.
Severity:  8 (error)
System Action:  Processing terminates.

Problem Determination:  Correct input value and rerun job.

DSN1826I  RECORD WITH OBID = rec-obid IS INVALID
FOR THIS CHAIN
Explanation:  This message indicates that the record with
OBID 'rec-obid' is invalid for the chain currently being proc-
essed, assuming the OBID of the parent or first record proc-
essed was not in error.
Severity:  4 (warning)
System Action:  Processing terminates.

Problem Determination:  If using the MAP function, make
sure the given values point to a valid record. Otherwise,
contact your IBM Support Center for assistance.

DSN1827I  THE SPECIFIED PAGE IS NOT A HASHED
DATA PAGE - THE REQUESTED FUNCTION
REQUIRES A HASHED DATA PAGE.
Explanation:  This message indicates that the HASH or
ANCHOR option of the MAP command was issued against a
nonhashed data page (that is, a page with no anchor points).
Severity:  4 (warning)
System Action:  Processing continues with the next set of
parameters.

Problem Determination:  If using the ANCHOR function,
examine the page-slot argument to ensure that the page value
is correct. If using the HASH function, ensure that the 'dbid'
value is correct. Otherwise, examine the SYSUT1 DD state-
ment to ensure that the table space is correct. If so, use the
RID or PAGE function to achieve the desired mapping.

DSN1828I  OBID = rec-obid IS INVALID FOR THIS DATA-
BASE
Explanation:  This message indicates that the record with
OBID 'rec-obid' is invalid for the database currently being processed.
This message is issued by the following CSECTs: DSN1MAP,
DSN1LNKF
Severity:  4 (warning)
System Action:  Processing continues with the next set of
parameters.

Problem Determination:  If using the MAP command, insure
that all user supplied offsets actually point to valid data. If you
suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**DSN1829I**  MAPPING MUST STOP AT PARENT RECORD WHEN USING THE BACKWARD POINTER

**Explanation:** This message indicates that the requested mapping stopped at the parent record rather than the starting record because of the use of backward pointers.

**Severity:** 4 (warning)

**System Action:** Processing continues.

**DSN1830I**  INVALID NUMBERS OF VALUES SPECIFIED FOR func-name

**Explanation:** This message indicates that either:
- No value was specified.
- An odd number of values was specified for a function that requires an even number of values.

**Severity:** 8 (error)

**System Action:** Processing terminates.

**Problem Determination:** Refer to *DB2 Utility Guide and Reference* for the parameter specifications. Correct the parmlist and rerun the job.

**DSN1831I**  END OF DATE REACHED, PAGE = page-number IS OUT OF RANGE

**Explanation:** This message indicates that page ‘page-no’, specified as a parameter of the MAP option, caused the END-OF-DATA condition to be reached. The page number is invalid for the table space being mapped.

**Severity:** 4 (warning)

**System Action:** Processing continues with the next set of parameters.

**Problem Determination:** Correct the page parameter of the MAP option and rerun the job.

**DSN1833I**  ANCHOR POINT IS NOT IN USE

**Explanation:** The anchor point to be mapped has a value of 0, which means that it is not in use. Therefore, no links are checked.

**Severity:** 4 (warning)

**System Action:** Processing continues with the next set of parameters.

**Problem Determination:** Make changes to the system configuration, if possible, to allow more virtual storage to be available in the address space.

**DSN1835I**  THE REQUESTED PAGE page-no IS BEYOND THE END OF THE TABLESPACE.

**Explanation:** A request for a page number from an anchor point or a child pointer in a parent record is pointing beyond the high used RBA of the data set. Either the rid is in error or the data set has been truncated.

**Severity:** 4 (warning)

**System Action:** The page is marked for output if the FORMAT/DUMP option is in effect. Processing continues.

**Problem Determination:** Examine previous diagnostic and system messages, correct problem if possible and rerun the job. Otherwise, contact your IBM Support Center for assistance.

**DSN1940I**  csect-name COMPRESSION REPORT

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>noncmpbytes</td>
<td>KB WITHOUT COMPRESSION</td>
</tr>
<tr>
<td>cmpbytes</td>
<td>KB WITH COMPRESSION</td>
</tr>
<tr>
<td>percsave</td>
<td>PERCENT OF THE BYTES WOULD BE SAVED</td>
</tr>
<tr>
<td>numdictrows</td>
<td>ROWS SCANNED TO BUILD DICTIONARY</td>
</tr>
<tr>
<td>numscanrows</td>
<td>ROWS SCANNED TO PROVIDE COMPRESSION ESTIMATE</td>
</tr>
<tr>
<td>numdictents</td>
<td>DICTIONARY ENTRIES</td>
</tr>
<tr>
<td>auncmprowlen</td>
<td>BYTES FOR AVERAGE UNCOMPRESSED ROW LENGTH</td>
</tr>
<tr>
<td>avgcmprowlen</td>
<td>BYTES FOR AVERAGE COMPRESSED ROW LENGTH</td>
</tr>
<tr>
<td>dictpages</td>
<td>DICTIONARY PAGES REQUIRED</td>
</tr>
<tr>
<td>noncmppages</td>
<td>PAGES REQUIRED WITHOUT COMPRESSION</td>
</tr>
<tr>
<td>cmppages</td>
<td>PAGES REQUIRED WITH COMPRESSION</td>
</tr>
<tr>
<td>pctpgsave</td>
<td>PERCENT OF THE DB2 DATA PAGES WOULD BE SAVED</td>
</tr>
</tbody>
</table>

**Explanation:** DSN1COMP completed successfully. This report contains the compression savings estimate based on the input data set. For a sample of the report, see the DSN1COMP utility in *DB2 Utility Guide and Reference*.

The compression statistics follow:

- **noncmpbytes** The total number of uncompressed KB (where KB = 1024 bytes) for the data rows (including the row prefix). This number was rounded to the nearest KB.
- **cmpbytes** The total number of compressed KB for the data rows (including the row prefix). This number was rounded to the nearest KB.
- **percsave** The percentage of bytes that would be saved if the rows were compressed.

The values above reflect only the number of bytes for the data row and the associated row prefix (6 bytes). DB2 page and dictionary page overhead is not included.

**Problem Determination:** Make changes to the system configuration if possible, to allow more virtual storage to be available in the address space.
auncmprolwn  Average uncompressed row length.
avgcmprolwn  Average compressed row length.
dictpages    The number of DB2 pages required for the compression dictionary.
noncmppages  The estimated number of DB2 pages required by the uncompressed data rows. Space required for PCTFREE and FREEPAGE is included. This number was rounded up to the next integer.
cmppages     The estimated number of DB2 pages required by the compressed data rows. Space required for PCTFREE and FREEPAGE is included. Dictionary pages are also included. This number was rounded up to the next integer.
pctpgsave    An estimate of the percentage of DB2 pages that would be saved by compressing the data rows.

Severity: 0 (informational)
System Action: The utility completed successfully.

DSN1941I csect-name COMPRESSION ESTIMATE WAS NOT CALCULATED
Explanation: There is insufficient data to build a compression dictionary. Either the input data set is empty, or the number of rows in the input data set was insufficient to build the dictionary.
Severity: 8 (error)
System Action: Processing terminated.
User Response: Increase the number of rows in the input data set.

DSN1942I csect-name ERROR WHEN BUILDING THE COMPRESSION DICTIONARY
Explanation: An internal error was encountered while building the dictionary.
Severity: 8 (error)
System Action: Processing terminated.

System Programmer Response: Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

DSN1943I csect-name DICTIONARY PAGE ENCOUNTERED
Explanation: A dictionary page was encountered while processing the input data set. This indicates that the data is in compressed format.
Severity: 8 (error)
System Action: Processing terminated.
User Response: Run DSN1COMP on a data set containing data that is not in a compressed format.

DSN1944I csect-name INPUT PARAMETERS
Explanation: The input parameters used by DSN1COMP are either user-supplied or default values.
Severity: 0 (informational)
System Action: Processing continues.

DSN1945I csect-name DICTIONARY TREE
Explanation: The compression dictionary tree follows. Each node is formatted in the SYSPRINT data set.
Severity: 0 (informational)
System Action: Processing continues.

DSN1946I csect-name IMAGE COPY CONTAINING MULTIPLE PARTITIONS
Explanation: An image copy containing multiple partitions is not acceptable input to the DSN1COMP utility.
Severity: 8 (error)
System Action: Processing terminated.
User Response: Run DSN1COMP on an image copy containing a single partition.

DSN1947I DSN1947I csect-name COMPRESSION UNAVAILABLE FOR INDEX SPACES
Explanation: Index data was provided as input to DSN1COMP. Compression is supported only for table space data.
Severity: 8 (error)
System Action: Processing terminated.
User Response: Provide DSN1COMP with data containing table space data.

DSN1950I DSN1COPY HAS SUPPRESSED VSAM OPEN VERIFY, ACBERRFLG=acb-error-code.open-option
Explanation: DSN1COPY suppresses the VSAM VERIFY done by the VSAM OPEN for the SYSUT1 data set. The VSAM VERIFY is not needed for the VSAM data sets used by DB2. For DB2 VSAM data sets, the data set hi-used RBA in the ICF catalog is always current.
This message is issued by the following CSECT: DSN1COPY
Severity: 0 (informational)
System Action: Processing continues.

DSN1951I ODD NUMBER OF HEX CHARACTERS SPECIFIED IN VALUE PARM.
Explanation: The VALUE parameter contained an odd number of hexadecimal characters. Only even numbers of hexadecimal characters are allowed.
This message is issued by the following CSECT: DSN1VAL
Severity: 8 (error)
System Action: Processing terminates.
User Response: Correct the number of hexadecimal digits specified for the VALUE parameter and resubmit the job.
Problem Determination: Refer to DSN1COPY documentation for parameter requirements in DB2 Utility Guide and Reference.

**DSN1952I** UNEXPECTED END OF INPUT DATA - CHECK FOR INVALID SPECIFICATION OF THE 32K PARAMETER.

Explanation: End of data occurred for the image copy data set specified in SYSUT1 before the first page could be read. Either the wrong input data set was specified or 32KB was specified even though the input data set contains 4KB pages.

This message is issued by the following CSECT: DSN1COPY

Severity: 8 (error)

System Action: Processing terminates.

User Response: Remove the 32KB parameter if the input data set contains 4KB pages, change the name of the input data set to specify a valid image copy, or remove the FULLCOPY or INCRCOPY parameter.

Problem Determination: Refer to DSN1COPY documentation for parameter requirements.

**DSN1953I** STARTING PAGE NUMBER REQUIRES AN INPUT DATA SET NAME OF data-set-name

Explanation: The starting page number of the page range to be printed is inconsistent with the input data set specified.

This message is issued by the following CSECTs: DSN1COPY, DSN1PRNT

Severity: 8 (error)

System Action: Processing terminates.

User Response: Ensure that NUMPARTS, the 32KB parameter (or its default of 4KB), and the starting page number are correct. If it is correct, change the input data set name as indicated by the message.

Problem Determination: Refer to DSN1COPY or DSN1PRNT documentation for parameter requirements.

**DSN1954I** csect-name PARAMETER PAGESIZE OR LOB IS MISSING OR INCORRECTLY SPECIFIED.

Explanation: This message is issued in the following situations:

- The program tried to determine the page size from the first page of the data set, but the first page is not a header page, or
- The first page is a LOB header page and the LOB parameter is missing.

This message is issued by the following CSECTs: DSN1COPY, DSN1PRNT.

Severity: 8 (error)

System Action: Processing terminates.

User Response: If the input data set is not a LOB table space, specify the PAGESIZE parameter. If the input data set is a LOB table space, specify the LOB or PAGESIZE parameter or both, as appropriate.

**DSN1955I** SYSUT1 DD CARD IS MISSING

Explanation: No SYSUT1 DD statement was provided.

This message is issued by the following CSECTs: DSN1COPY, DSN1PRNT, DSN1COMP

Severity: 8 (error)

System Action: Processing terminates.

User Response: Rerun the job with a SYSUT1 DD statement.

**DSN1956I** csect-name SYNTAX ERROR: parm2 IS SPECIFIED WITHOUT parm1

Explanation: The keyword parm1 must be specified with parm2.

Severity: 8 (error)

System Action: Processing terminates.

User Response: Resubmit the job specifying the correct keyword.

**DSN1957I** csect-name COMPRRESSED RECORDS CANNOT BE EXPANDED DUE TO INCORRECT INPUT DATA SET SPECIFICATION.

Explanation: DSN1PRNT issues this message when the EXPAND option is specified. The input data set might be an incremental image copy data set.

Severity: 8 (error)

System Action: Processing terminates.

User Response: Resubmit the job specifying the correct input data set.

**DSN1958I** INVALID DATA SET NAME.

Explanation: A DB2 table space was given an incorrect name.

This message is issued by the following CSECT: DSN1CHDS

Severity: 8 (error)

System Action: Processing terminates.

User Response: Correct the output data set name if FULLCOPY or INCRCOPY were specified. If a page range is being printed, correct the input data set name. Refer to Section 2 (Volume 1) of DB2 Administration Guide for a discussion of DB2 data set naming conventions.

**DSN1959I** BOTH FULLCOPY AND INCRCOPY PARAMETERS CANNOT BE SPECIFIED.

Explanation: DSN1COPY cannot apply to both full images copies and incremental image copies in the same execution. The full image copies are applied first. Each incremental image copy must then be applied in separate steps, starting with the oldest incremental copy.

This message is issued by the following CSECT: DSN1SDEF

Severity: 8 (error)

System Action: Processing will terminate.

User Response: Omit either FULLCOPY or INCRCOPY.
# DSN1960I - csect-name input/output DATA SET ALLOCATION ERROR. ERROR FIELD IS ERRFIELD value1. INFORMATION FIELD IS INFFIELD value2.

Explanation: The allocation of an input or output data set failed. The ERRFIELD value1 contains the error number; the INFFIELD value2 contains the information number. See SVC99 error codes in OS/390 MVS Diagnosis: Reference or OS/390 MVS Programming: Authorized Assembler Services Guide for help in determining the cause of the error.

Severity: 8 (error)
System Action: Processing terminates.
User Response: Correct the cause of the allocation error and resubmit the job.

# DSN1961I - PIECE NUMBER value IS INVALID.

Explanation: A page was retrieved that has a piece number greater than NUMPARTS for partitioned table spaces or greater than the default of 32 for linear table spaces. 'DPIECNUM value' is the piece number for the retrieved page. For page range printing, this message is issued if the starting page number has an invalid piece number as determined from calculations involving NUMPARTS and the page size.

Severity: 8 (error)
System Action: Processing will terminate.
User Response: Look in SYSIBM.SYSTABLESPACE for the correct number of partitions for this page. Specify the correct number of partitions and resubmit the job. If the page is not partitioned, then either omit the NUMPARTS parameter or specify NUMPARTS as zero.

# DSN1962I - OUTPUT DATA SET odsname NOT FOUND

Explanation: DB2 cannot find 'odsname' because it has not yet been defined.

Severity: 8 (error)
System Action: Processing is terminated.
User Response: Use access method services to define 'odsname' and any other VSAM data sets that have not yet been defined.

# DSN1963I - ZERO PAGES ARE INVALID WHEN IMAGE COPY DATA SETS ARE USED AS INPUT TO STAND ALONE UTILITIES.

Explanation: A page in an IMAGE COPY data set has a zero header. Pages with zero headers are illegal if image copy data sets are used as input to stand-alone utilities.

Severity: 4 (warning)
System Action: Processing continues.
User Response: If the image copy data set name was invalid, look in SYSIBM.SYSCOPY for valid names. Resubmit the valid IMAGE COPY data set to the stand-alone utility. If the IMAGE COPY data set had a valid name, use the REPAIR utility to replace the zero pages with valid data pages.

# DSN1964I - NO VALUE HAS BEEN SPECIFIED FOR THE NUMBER OF PARTITIONS.

Explanation: No value was given for the number of partitions. This value should follow the 'NUMPARTS' parameter.

Severity: 8 (error)
System Action: Processing will terminate.
User Response: Look in SYSIBM.SYSTABLESPACE for the correct number of partitions for this page. Specify the correct number of partitions and resubmit the job. If the page is not partitioned, then either omit the NUMPARTS parameter or specify NUMPARTS as zero.

# DSN1965I - THE PARTITION NUMBER VALUE IS INVALID.

Explanation: The partition number value following the 'NUMPARTS' parameter is not between 1 and 64.

Severity: 8 (error)
System Action: Processing will terminate.
User Response: Look in SYSIBM.SYSTABLESPACE for the correct number of partitions for this page.

# DSN1966I - OUTPUT DATA SET odsname NOT FOUND

Explanation: More than 500 records of OBIDs were specified in the SYSXLAT file.

Severity: 8 (error)
System Action: Processing stops.
Problem Determination: DSN1COPY cannot be used for table spaces containing more than 500 tables.

# DSN1967I - THE OBID ARRAYS ARE FULL

Explanation: There should not be any repeated source OBIDs or target OBIDs within the SYSXLAT file.

Severity: 8 (error)
System Action: Processing is terminated.
User Response: Change the SYSXLAT file.

# DSN1968I - OBIDS SHOULD NOT BE DUPLICATED

Explanation: The QSAM OPEN for the SYSXLAT file failed because no DD statement was provided.

Severity: 8 (error)
System Action: Processing is terminated.
User Response: Notify system programmer.
System Programmer Response: Provide a SYSXLAT DD statement if OBID translate is to be done. Otherwise, remove the SYSXLAT parameter and rerun.
Problem Determination: Follow standard QSAM diagnostic procedures.

**DSN1970I** DATA PAGE CONTAINING OBID xxxx, HAS NO MATCHING VALUE IN THE SYSXLAT FILE

Explanation: One of the OBID records of the SYSXLAT file contains a source OBID value that does not match the OBID value of the source system.

Severity: 8 (error)

System Action: Processing is terminated.

User Response: Provide that record of the SYSXLAT file which contains an unmatched OBID value with an OBID that matches the OBID value of the source system.

This error can also be caused when an OBIDXLAT is attempted on an incremental image copy of a compressed segmented table space. For more information on how to proceed, see the OBIDXLAT option description under DSN1COPY in DB2 Utility Guide and Reference.

**DSN1971I** DBID xxxx NOT FOUND IN THE SYSXLAT FILE. REPLACE SOURCE DBID xxxx OF THE SYSXLAT FILE WITH IT.

Explanation: The first record of the SYSXLAT file has the incorrect source DBID value.

Severity: 8 (error)

System Action: Processing is terminated.

User Response: Provide the first record of the SYSXLAT file with a source DBID value which matches the DBID value of the source system.

**DSN1972I** PSID xxxx NOT FOUND IN THE SYSXLAT FILE REPLACE SOURCE DBID xxxx OF THE SYSXLAT FILE WITH IT

Explanation: The second record of the SYSXLAT file has the incorrect source PSID value.

Severity: 8 (error)

System Action: Processing is terminated.

User Response: Provide the second record of the SYSXLAT file with the correct PSID value.

**DSN1973I** SOURCE DBID IS MISSING

Explanation: The first record of the SYSXLAT file contains no DBID value.

Severity: 8 (error)

System Action: Processing is terminated.

User Response: Provide the first record of the SYSXLAT file with a pair of source and target DBID values which match the DBID values of the source and target systems.

**DSN1975I** SOURCE OBID IS MISSING

Explanation: There is a record in the SYSXLAT file with no OBID value.

Severity: 8 (error)

System Action: Processing is terminated.

User Response: Correct the SYSXLAT file so that all the records following the first and second records will contain a pair of source and target OBID values.

**DSN1976I** TARGET PSID IS MISSING

Explanation: The target PSID is missing from the second record of the SYSXLAT file.

Severity: 8 (error)

System Action: Processing is terminated.

User Response: Provide the second record of the SYSXLAT file with a target PSID value which matches the PSID values of the target system.

**DSN1977I** SOURCE PSID IS MISSING

Explanation: The second record of the SYSXLAT file contains no PSID value.

Severity: 8 (error)

System Action: Processing is terminated.

User Response: Provide the second record of the SYSXLAT file with a pair of source and target PSID values which match the PSID values of the source and target systems.

**DSN1979I** SOURCE & TARGET VALUES MUST BE WITHIN THE RANGE OF 1 TO 65535.

Explanation: The SOURCE and TARGET values of the SYSXLAT file must be between 1 and 65535.

Severity: 8 (error)

System Action: Processing is terminated.

User Response: Provide the SYSXLAT file with values that are between 1 and 65535.

**DSN1980I** BROKEN PAGE BIT SET, WILL RESET AND RETRY BROKEN PAGE TEST

Explanation: This message indicates that a broken page was detected. If message DSN1990I is issued following this message, determine the cause of the broken page. If message DSN1990I is not issued, reset the broken page bit with the REPAIR utility to correct the problem. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Severity: 4 (warning)
System Action: Processing continues.
Operator Response: Notify the system programmer.
System Programmer Response: Use either the RECOVER or REPAIR utility to correct the broken page. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Problem Determination: The REASON identifies the nature of the error. The REASON is used for diagnostic purposes by the IBM Support Center.

**DSN1981I** INVALID PARAMETER FIELD: bad-parameter
Explanation: An invalid input parameter was detected on the EXEC statement. The parameter is either not a valid keyword or it has invalid subparameters associated with it.
Examples of invalid subparameters are:
- The NUMPARTS subparameter was other than ‘(nn)’. ‘nn’ is a decimal number.
- The NUMPARTS subparameter was missing either a left or right parenthesis.
- The PRINT subparameter was missing either a left or right parenthesis.
- The PRINT subparameter specified a digit in a page number which was not hexadecimal.
- The PRINT subparameter contained a starting page number that is larger than the ending page number.
- The PRINT subparameter contains a page number larger than six hexadecimal digits.
Severity: 8 (error)
System Action: Processing terminates.
User Response: Correct the indicated parameter on the EXEC DD statement, and resubmit the job.
Problem Determination: Refer to DSN1COPY, DSN1PRNT, or DSN1COMP documentation for parameter requirements.

**DSN1982I** NO BLANKS ARE ALLOWED WITHIN THE PARAMETER LIST
Explanation: There is a space or spaces between one or more parameters in the utility list.
Severity: 8 (error)
System Action: Processing is terminated.
User Response: Check the parameter list and make sure that there are no spaces between any of the parameters.

**DSN1983I** csect-name DICTIONARY IS INVALID, REASON= X’nnnn’
Explanation: The dictionary found in the data set is invalid. A DB2 internal error occurred during the validation of the expansion dictionary.
Severity: 8 (error)
System Action: Processing terminates.
User Response: Verify that the correct data set is specified. You can delete the EXPAND option and resubmit the job.

**DSN1984I** UNEXPECTED PAGE NUMBER, EXPECTING: expected-page-number
Explanation: This message indicates that an unexpected page number was encountered. This message may be received if the input data set is an image copy but the FULLCOPY or INCRCOPY parameters were not specified. The 'expected page number’ that is displayed in (hexadecimal) is the page number that was expected, not the one that was encountered.
Severity: 8 (error)
System Action: Processing is terminated.
User Response: Notify the system programmer.
System Programmer Response: Use DSN1PRNT to dump the table space or index space. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**DSN1985I** ZERO PAGES ENCOUNTERED. FIRST PAGE = first-zero-page-number, LAST PAGE = last-zero-page-number
Explanation: One or more pages zero pages were encountered with valid data pages after them. A zero page is a page of all zeros or a page with only the page-synchronization bit on in the first and last byte of the page. The 'first zero page number' and the 'last zero page number' displayed in hexadecimal are the pages where zeros were first encountered and last encountered. In most cases, this is not an error condition. This is a normal condition for segmented table spaces and also for index spaces created with a FREEPAGE parameter not equal to zero. In addition, it is also normal for nonsegmented table spaces to contain zero pages after certain update scenarios terminated abnormally and data rollback was required.
Severity: 4 (warning)
System Action: Processing continues.
User Response: Notify the system programmer.
System Programmer Response: If the zero page is the result of segmenting, no action is necessary. Similarly, if the zero page is a valid zero page that was introduced by DB2, no action is necessary as this page is free space and is used by DB2 when needed. If the zero page is a valid zero page and you want to remove it from the table space, run the REORG utility.
To help determine if the zero page was validly introduced by DB2, run the CHECK INDEX utility. This assumes that at least one index is defined on the affected table space.
If the zero page is determined to be invalid, you need to run the RECOVER utility.
**DSN1986I**  NEITHER FULLCOPY NOR INCRCOPY PARAMETERS MAY BE SPECIFIED WITH THE SEGMENT PARAMETER.

**Explanation:** The parameters SEGMENT, FULLCOPY, and INCRCOPY describe the type of input that SYSUT1 references. SEGMENT is only relevant when a table space or index space is the input. FULLCOPY and INCRCOPY are only relevant when an image copy is the input. If the input data set is a segmented table space, then the FULLCOPY or INCRCOPY parameters should not be specified. If the input data set is a full or incremental image copy, then SEGMENT should not be specified.

**Severity:** 8 (error)
**System Action:** Processing will terminate.
**User Response:** Make sure that the parameters are correct. Not specifying the parameters correctly can give unpredictable results.

**DSN1987I**  csect-name INDEX PAGE CONTAINING OBID id HAS NO MATCHING VALUE IN THE SYSXLAT FILE.

**Explanation:** This message is issued when the OBID on the page does not find a matching value in the input source OBID list. This message can also be issued when the input does not have enough OBID values.

**Severity:** 8 (error)
**System Action:** Processing terminates with a dump of the page on which the OBID does not find a match in the source list.
**User Response:** Resubmit the job with correct input OBID values.

**DSN1988I**  csect-name EXPAND KEYWORD IS SPECIFIED BUT DICTIONARY IS NOT FOUND

**Explanation:** DSN1PRINT issues this message when the EXPAND option is specified. The dictionary was not found in the data set. An incorrect data set piece is specified or an incorrect data set number is specified for a multi-piece linear data set.

**Severity:** 8 (error)
**System Action:** Processing terminates.
**User Response:** Resubmit the job specifying the correct keyword or the correct data set name.

**DSN1989I**  csect-name IS PROCESSED WITH THE FOLLOWING OPTIONS:

- check/32K/fullcopy/incrcopy/segment/
- numparts=n/format/expand/swonly/
- print/value/obidxlat/reset/no check/4K/
- no imagecopy/nonsegment/numparts=0/
- no print/no value/no obidxlat/
- no format/no reset/no expand/no swonly

**Explanation:** The stand-alone utility named csect-name is processing with the options that are either specified or supplied by default.

**Severity:** 0 (informational)
**System Action:** Processing continues.
**User Response:** Make sure that the parameters are correct. Not specifying the parameters correctly can give unpredictable results.

**DSN1990I**  csect-name BROKEN PAGE. PAGE NUMBER = broken-page-number. REASON: comment, SERVICE INFO: CODE = c1, d1 = v1 ... dn = vn

**Explanation:** During page checking, the page was detected as broken for the reason given in the message. The page number is displayed in hexadecimal format.

**Severity:** 4 (warning)
**System Action:** Processing continues.
**Operator Response:** Notify the system programmer.

**System Programmer Response:** Use either the RECOVER or REPAIR utility to correct the broken page.

**Problem Determination:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Service information is used for diagnostic purposes by the IBM Support Center.

**DSN1991I**  UNCLUSTERED DATA DETECTED. RID: ‘xxxxxxxx’X TABLE: tablename INDEX KEY: index-key

**Explanation:** Data is not broken. Only the arrangement of data on one of the following DB2 Catalog table spaces: SYSDBASE, SYSPLAN, and SYSVIEWS has been affected. Normally, data on these pages is arranged to minimize locking contention. DSN1COPY found that the arrangement of data no longer minimizes locking contention for the objects named by the INDEX KEY for the given TABLE. Therefore, an increase in the number of deadlocks and timeouts may be seen on SYSDBASE, SYSPLAN, and SYSVIEWS.

**System Action:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** Contact your IBM Support Center for assistance. Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 5, 64.

**DSN1992I**  VSAM PUT ERROR, RPLERRREG = return-code, RPLERRCD = reason-code

**Explanation:** VSAM PUT failed with the indicated error code.

**Severity:** 8 (error)
**System Action:** Processing terminates.
**User Response:** Notify system programmer.

**System Programmer Response:** Follow standard VSAM diagnostic procedures. See DFSMS/MVS: Macro Instructions for Data Sets for more information on the standard VSAM procedures, the RPL fields, and the VSAM control blocks.
Explanation: This message indicates that a stand-alone utility has not successfully completed processing. The page count is displayed in decimal format.

Severity: 8 (error)

System Action: Processing terminates.

User Response: Examine the previous error message of the application program.

System Programmer Response: Correct the previous error and resubmit the job.

Explanation: This message indicates that a stand-alone utility successfully completed processing. The page count is displayed in decimal format.

Severity: 0 (informational)

System Action: Processing terminates.

Explanation: VSAM GET failed with the indicated 'return-code' and 'reason-code'.

Severity: 8 (error)

System Action: Processing terminates.

User Response: Notify system programmer.

System Programmer Response: Follow standard VSAM diagnostic procedures. See DFSMS/MVS: Macro Instructions for Data Sets for more information on the standard VSAM procedures and the VSAM control blocks.

Explanation: The indicated 'data-set-name' is used for output. 'data-set-type' is either VSAM or SEQ (for sequential).

Severity: 0 (informational)

Explanation: The indicated 'data-set-name' is used for input. 'data-set-type' is either VSAM or SEQ (indicating sequential).

Severity: 0 (informational)

Explanation: This message indicates that a stand-alone utility started processing.

Severity: 0 (informational).

System Action: The stand-alone utility starts processing.
DSN2... Messages

There are two versions of the CICS attachment facility:

- The version shipped with DB2 requires CICS Version 3 Release 3 or an earlier release. This attachment facility issues DSNCxxx messages.
- The version shipped with CICS requires a CICS release later than Version 3 Release 3. This attachment facility issues DSN2xxx messages.

**DSN2001I** CICS UR INDOUBT RESOLUTION IS INCOMPLETE FOR ssid

Explanation: CICS cannot resolve the disposition of the units of recovery that DB2 holds indoubt from the previous connection because CICS was cold started.

System Action: The CICS attachment facility continues the startup process.

Operator Response: Notify the CICS system programmer.

System Programmer Response: You must resolve the indoubt units of recovery manually by issuing the DB2 -DISPLAY THREAD and -RECOVER INDOUBT commands.

**DSN2002I** csect-name DSN2CT.xx MODULE NOT FOUND

Explanation: The resource control table DSN2CT with suffix xx could not be loaded.

System Action: The CICS attachment facility initialization terminates.

User Response: Reenter the start command with the correct suffix. Ensure that the resource control table DSN2CT is in the correct application program library, which is concatenated in the JOBLIB or STEPLIB statement of your CICS startup JCL.

If DSN2CT is not in your application program library, ensure that you are using the correct version of the DSNCRCT macro to assemble DSN2CT. For CICS versions later than Version 3 Release 3, the correct DSNCRCT macro is in the CICS macro library rather than in the DB2 macro library.

**DSN2003I** THE ATTACHMENT FACILITY IS ALREADY ACTIVE

Explanation: The CICS attachment facility is already active and enabled to CICS.

System Action: The CICS attachment facility initialization is terminated.

Operator Response: Only one CICS attachment facility is permitted.

**DSN2004I** THE PLAN NAME IS NOT FOUND IN THE RCT

Explanation: This message is the response to a DSNC DISPLAY or DSNC DISCONNECT command. The plan specified in the command was not found in the resource control table (RCT).

System Action: The CICS attachment facility command is not processed.

Operator Response: Reenter the command with the correct plan name.

**DSN2005I** THE TRANSACTION NAME IS NOT FOUND IN THE RCT

Explanation: This message is the response to a DSNC DISPLAY or DSNC MODIFY command. The transaction specified in the command was not found in the resource control table (RCT).

System Action: The CICS attachment facility command is not processed.

Operator Response: Reenter the command with the correct transaction name.

**DSN2006I** THE dest DESTINATION ID IS INVALID

Explanation: This message is the response to a CICS attachment facility command. The destination ID dest specified in the command was not found in the CICS destination control table (DCT) or the resource control table (RCT).

System Action: The CICS attachment facility command is not processed.

Operator Response: Reenter the command with the correct destination ID.

**DSN2007I** THE COMMAND VERB IS MISSING OR INVALID

Explanation: The CICS attachment facility does not recognize the ACTION keyword on the entered command.

System Action: The command is not processed.

Operator Response: Reenter the command with the correct syntax.

**DSN2008I** KEYWORD IS MISSING OR INVALID

Explanation: A CICS attachment facility command contains an unknown positional keyword or a keyword is missing.

System Action: The command is not processed.

Operator Response: Reenter the command with the correct syntax.
DSN2009I  THE VALUE IN THE COMMAND IS INVALID

Explanation: The numeric value in the DSNC MODIFY command might be invalid. Otherwise, the error is caused by one of the following:

- The value in the command is greater than the value specified for the THRDM parameter in the resource control table (RCT).
- If the POOL RCT entry is being changed, the active thread count cannot be set to less than 3.

System Action: The command is not processed.
Operator Response: Reenter the command with a valid value.
System Programmer Response: If the number of threads required is more than the number allowed in the resource control table (RCT), specify a larger number of threads in the THRDM parameter and regenerate the table.

DSN2011I tran TRANSACTION ABENDED BECAUSE THREADS ARE UNAVAILABLE

Explanation: The transaction with CICS transaction ID tran was abnormally terminated because a thread connection to DB2 was not available for the transaction. This error message can occur when:

- TWAIT of the transaction entry in the resource control table is NO.
- TWAIT of the transaction entry is POOL, TWAIT in the pool entry is NO, and all threads in the POOL are active.

System Action: The indicated transaction is abended. No other action is taken by the CICS attachment facility.
Operator Response: Notify the CICS system programmer.
System Programmer Response: Determine which of the following actions will correct the problem:

- If more threads are available with the current generation of the resource control table (RCT), tell the master terminal operator to make more threads active by using the DSNC MODIFY command.
- Regenerate the RCT and make more threads available to the transaction that failed. Stop and then restart the CICS attachment facility to make the new RCT active.

DSN2012I THE ATTACHMENT FACILITY STOP QUIESCE IS PROCEEDING

Explanation: A DSNC STOP command entered by the master terminal operator is being processed.

System Action: The CICS attachment facility releases the terminal entering the command and proceeds with the quiesce process.
Operator Response: If the quiesce is not completed within the required time period, you can enter a DB2 -STOP FORCE command.
**DSN2016I**  
**csect-name THE CONNECTION OF CICS WITH name FAILED, 'reason-code'**

**Explanation:** The CICS attachment facility is terminating abnormally because an error occurred while connecting with DB2. The error is indicated by reason-code, and the specific DB2 subsystem is indicated by name.

**System Action:** The CICS attachment facility terminates with abend completion code X'04E'. If the initial identify fails because of an authorization error, DSN2042I is issued and no dump is requested.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Look up reason-code to determine the specific failure that caused the termination.

---

**DSN2017I**  
**ATTACHMENT OF A THREAD SUBTASK FAILED**

**Explanation:** The CICS attachment facility continues processing but is unable to start as many thread subtasks as are allowed in a resource control table (RCT) entry.

**System Action:** The CICS attachment facility attempted to terminate all subtasks that are currently unused, but none could be terminated. If other subtasks are not active to process the current transaction, CICS is requested to abend the transaction.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** The error might be caused by one of the following:

- There is a shortage of storage in the local storage queue area (LSQA).
- The maximum number of thread subtasks allowed was reached. The maximum is specified in the THRDMAX parameter of RCT. The DSNC DISPLAY STATISTICS command is useful in analyzing the current thread usage.

---

**DSN2018I**  
**name IS NOT ACTIVE**

**Explanation:** The DSNC STRT command cannot proceed because subsystem name is not active.

**System Action:** The DSNC STRT command processing ends without starting the CICS attachment facility.

**Operator Response:** Reenter the CICS attachment facility command after DB2 is started.

---

**DSN2019I**  
**THE MODIFY COMMAND IS COMPLETE**

**Explanation:** The DSNC MODIFY command completed successfully.

---

**DSN2020I**  
**THE DISPLAY COMMAND IS COMPLETE**

**Explanation:** The DSNC DISPLAY command completed successfully.

---

**DSN2021I**  
**THE DISCONNECT COMMAND IS COMPLETE**

**Explanation:** The DSNC DISCONNECT command completed successfully.

---

**DSN2022I**  
**THE ATTACHMENT FACILITY STOP FORCE IS PROCEEDING**

**Explanation:** A DSNC STOP FORCE command entered by the master terminal operator is being processed.

**System Action:** The CICS attachment facility releases the terminal entering the command and proceeds with the STOP FORCE processing.

---

**DSN2023I**  
**THE ATTACHMENT FACILITY HAS CONNECTED TO name USING rct-name**

**Explanation:** The DSNC STRT command successfully completed. Subsystem name is now available to CICS. The name of the resource control table (RCT) that was specified for this start of the CICS attachment facility is rct-name.

**System Action:** The DSNC STRT command completes processing. The CICS attachment facility is active.

---

**DSN2024I**  
**dest CANNOT BE LOCATED IN THE DCT**

**Explanation:** The destination shown in the message cannot be located in the CICS destination control table (DCT).

**System Action:** The CICS attachment facility startup process continues. The destination entry in the resource control table (RCT) is set to '***' for potential modification by the CICS attachment facility.

**Operator Response:** Notify the system programmer. Use the DSNC MODIFY command to set the error destination to the correct identification characters.

**System Programmer Response:** Correct either the RCT or the DCT to synchronize the error destinations.

---

**DSN2025I**  
**THE ATTACHMENT FACILITY IS INACTIVE**

**Explanation:** This is the final message issued by the CICS attachment facility to inform the resource control table error destinations that the CICS attachment facility completed the shutdown process.

**System Action:** The CICS attachment facility is terminated.

---

**DSN2026I**  
**DSN2STOP FAILED TO DISABLE THE name RMI EXIT**

**Explanation:** The CICS attachment facility failed to disable the named resource manager interface (RMI) exit. Either the exit was in use at the time DSN2STOP tried to disable it, or an abend occurred in the RMI exit code while the 'in use' flag was on. The CICS system must be stopped and restarted before the CICS attachment facility can be restarted.

**System Action:** The CICS attachment facility continues termination processing after dumping the CICS trace, the resource control table (RCT), and the connection control table (CCT).

**Operator Response:** Notify the CICS attachment facility system programmer. CICS must be stopped and restarted before restarting the CICS attachment facility.

**System Programmer Response:** This could be a problem in the CICS 'task-related user exit'. Analyze the trace and any dumps associated with this execution to determine the source of the error.
DSN2027I  SHUTDOWN IS IN PROGRESS. transaction COMMANDS MAY NOT BE ENTERED
Explanation: The CICS attachment facility does not accept commands directed to DB2 during or after the termination of the CICS attachment facility.
System Action: The command is rejected.
User Response: Notify the CICS attachment facility system programmer.

DSN2028I  USER IS NOT AUTHORIZED FOR transaction COMMANDS
Explanation: DB2 rejected the command request during the sign-on of the user. Therefore, the user is assumed to be unauthorized for the requested function in the command.
System Action: The command is rejected.
Operator Response: Notify the CICS attachment facility system programmer.
System Programmer Response: The authorization ID used is described in the generation procedures of the resource control table (RCT). If this user should be allowed access to the command, use the GRANT statement to grant authorization.

DSN2029I  transaction COMMAND FAILED, REASON CODE rc
Explanation: The DB2 command, identified in the message as transaction, failed to return a response message indicating the action taken by the command. DB2 returned reason code rc.
System Action: The results of the command are unknown.
Operator Response: Notify the CICS attachment facility system programmer.
System Programmer Response: Check the master console for any messages indicating why the command failed. Refer to the explanation of the reason code returned by DB2 in Section 4. DB2 Codes on page 577

DSN2030E  AN ERROR HAS OCCURRED WRITING TO THE TRANIENT DATA OUTPUT DESTINATION destination
Explanation: The CICS attachment facility encountered an error while writing to the indicated destination.
System Action: The CICS attachment facility continues operation.
Operator Response: Notify the system programmer. If the destination is one of the resource control table error destinations, use the CICS MODIFY command to change the destination code to another destination, if one is available.
System Programmer Response: Follow CICS procedures to correct the error. Refer to CICS/ESA Problem Determination Guide for additional information.

DSN2031I  THE COMMAND IS INVALID. THE ATTACHMENT FACILITY IS INACTIVE
Explanation: STRT is the only valid command when the CICS attachment facility is inactive. No other commands to the CICS attachment facility are accepted.
System Action: The command is rejected.

DSN2032I  transaction COMMAND ALTERNATE DESTINATION OUTPUT COMPLETE
Explanation: The DB2 command identified in the message as transaction is complete. The resulting output should be available at the requested device.
System Action: Processing continues normally.

DSN2033I  TERMINAL termid IS NOT SUPPORTED BY BMS OR IS INVALID
Explanation: This message is issued in response to a CICS attachment facility or DB2 command that requested an alternate destination for the response. CICS basic mapping support (BMS) encountered an error while routing to the requested terminal named termid.
System Action: The output from the command might be suppressed.
Operator Response: Ensure that the terminal ID was correctly entered. Otherwise, notify the system programmer.
System Programmer Response: Verify that the terminal ID is valid. This message might occur if the destination device is not supported by BMS or if it is not defined to CICS. If termid is CSMT, this message might also follow message DSN2030E. The attachment facility unconditionally routes output to terminal CSMT following a transient data destination error.

DSN2034I  INDOUBT RESOLUTION FOR ur-id IS INCORRECT
Explanation: CICS indicates recovery is required for the ur-id, but the unit of recovery is not indoubt to DB2.
System Action: The CICS attachment facility continues the startup process.
Operator Response: Notify the CICS system programmer.
System Programmer Response: CICS tried to recover a unit of recovery using an identifier that was not in the resolution request list from DB2. Use the DB2 -DISPLAY THREAD and -RECOVER INDOUBT commands to ensure that all indoubt units of recovery are resolved.
You must identify the reason for the inconsistency. A DB2 cold start, for example, might cause the problem.

DSN2035I  INDOUBT RESOLUTION FOR ur-id IS INCOMPLETE
Explanation: CICS indicates recovery should not be required for the ur-id, but DB2 is indoubt.
System Action: The CICS attachment facility continues the startup process.
Operator Response: Notify the CICS system programmer.
System Programmer Response: CICS cannot recover a unit of recovery using an identifier that was in the resolution request list from DB2. Use the DB2 -DISPLAY THREAD and
DSN2036I  INDOUBT RESOLUTION FOR  ur-id IS INCONSISTENT

Explanation: CICS indicates recovery resolution for the ur-id should be ABORT (backout), but DB2 indicates the resolution should be COMMIT.

This error can be caused by a damaged CICS system journal file.

System Action: DB2 committed the unit of recovery. The CICS attachment facility continues the startup process.

Operator Response: Notify the CICS system programmer.

System Programmer Response: CICS indicates recovery resolution for the ur-id IS NOT ACTIVE and the DB2 attachment was not committed because the user was not authorized to access DB2. Authorization was denied by either RACF or a user-written connection exit.

System Programmer Response: The DSNC DISPLAY TRANSACTION or DSNC DISPLAY PLAN command was entered, but there were no active threads created. The CICS attachment facility might have identified and signed on the attached subtasks, but a create thread was not issued for any of the subtasks.

DSN2037A  subsystem IS NOT ACTIVE transaction IS WAITING

Explanation: The CICS attachment facility start transaction identified in the message is waiting for notification from the specified DB2 subsystem that it is active. The start of the CICS attachment facility is complete after DB2 has started.

System Action: The CICS attachment facility terminates normally.

Operator Response: Start the DB2 subsystem.

System Programmer Response: CICS and/or DB2 restart was not successful because the user was not authorized to access DB2. Authorization was denied by either RACF or a user-written connection exit.

DSN2038I  THE COMMAND IS INVALID WHILE WAITING FOR  subsystem name

Explanation: The command entered cannot be processed while the CICS attachment facility is waiting for the DB2 subsystem to start. The name of the DB2 subsystem that is not yet operational is  subsystem name.

System Action: The command is rejected.

DSN2039I  THE ERROR DESTINATIONS ARE: d1 d2 d3

Explanation: The CICS attachment facility initialization is terminating.

System Action: The CICS attachment facility initialization is completed.

Operator Response: Notify the CICS system programmer.

System Programmer Response: Analyze any abend dumps associated with this message to determine the cause of the failure.

DSN2040I  MODULE  name  COULD NOT BE FOUND

Explanation: During the CICS attachment facility initialization, an attempt was made to locate and load the named module, but it was not found in any of the libraries accessible to MVS through the MVS LOAD macro.

System Action: The CICS attachment facility initialization is terminated.

Operator Response: Notify the CICS attachment facility system programmer.

System Programmer Response: Check the CICS JOBLIB/STEPLIB libraries and ensure that the CICS SDFHAUTH and the DB2 SDSNLOAD libraries are defined there.

DSN2041I  NO ACTIVE THREADS

Explanation: A DSNC DISPLAY TRANSACTION or DSNC DISPLAY PLAN command was entered, but there were no active threads created. The CICS attachment facility might have identified and signed on the attached subtasks, but a create thread was not issued for any of the subtasks.

DSN2042I  CONNECTION NOT AUTHORIZED TO  name

Explanation: The attempt to connect to the named DB2 subsystem failed because the user was not authorized to access DB2. Authorization was denied by either RACF or a user-written connection exit.

System Action: The CICS attachment facility terminates normally.

Operator Response: Notify the system programmer.

System Programmer Response: The user specified on the CICS job was not authorized to connect to the named DB2 subsystem. Refer to Section 3 (Volume 1) of DB2 Administration Guide for information on how to authorize a user to access DB2.

DSN2043I  DSNCSTOP ENCOUNTERED ERROR, RECOVERY ROUTINE started/completed

Explanation: A CICS abend occurred while disconnecting the CICS attachment facility from DB2 and deleting it from storage. This message might be issued twice. It is issued at the start of the CICS task is abended with reason code 00C30011. No other action is taken by the CICS attachment facility.

System Action: The recovery routine is successful, the CICS attachment facility is terminated normally.

Operator Response: Notify the system programmer.

System Programmer Response: Analyze any abend dumps associated with this message to determine the cause of the failure.

DSN2044I  DSNCRT ENTRY HAS BEEN CORRUPTED OR OVERLAID

Explanation: The CICS attachment facility detected that a resource control table (RCT) entry was corrupted or overlaid since the CICS attachment facility was last started.

System Action: The CICS task is abended with reason code 00C30011. No other action is taken by the CICS attachment facility.

Operator Response: Notify the system programmer.

System Programmer Response: Analyze the abend dumps associated with this message to determine which CICS transaction and RCT entry was corrupted. Restart the CICS attachment facility to obtain a valid copy of the RCT.
If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem. The CICS attachment facility received a request from a resource manager interface (RMI) named rmi-name. This RMI is not known by the CICS attachment facility.

**System Action:** The CICS task is abended with a CICS transaction dump.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Analyze the CICS transaction dump to determine the source of the unknown resource manager interface (RMI) request.

**Problem Determination:** CICS dump information, such as the trace table and program storage, can aid in determining which module issued the request. The CICS EXEC interface block resource name field, EIBRSRCE, contains the name of the RMI.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

The CICS attachment facility requires a TWASIZE of twasize on all transactions that execute DSN2COM1. Either the TWASIZE that was specified is less than the requirement, or no TWASIZE was specified at all.

**System Programmer Response:** Allow a larger amount of dynamic storage on your CICS system. Alternatively, you can delete unused entries or lower THRDA and THRDM values in your RCT, which reduces the size of the storage that the attachment facility requires.

For a load error, check the MVS console log for any preceding messages to determine why the load failed. If there is not enough free REGION space to load the RCT, see the appropriate CICS documentation for information on tuning your CICS system.

The CICS attachment facility was unable to locate the required amount of storage. This message might be issued if an error occurs while the attachment facility is loading the data only load module, DSN2CTxx.

**System Programmer Response:** Delete unused entries or lower THRDA and THRDM values in your RCT, which reduces the size of the storage that the attachment facility requires.

For a load error, check the MVS console log for any preceding messages to determine why the load failed. If there is not enough free REGION space to load the RCT, see the appropriate CICS documentation for information on tuning your CICS system.

**System Programmer Response:** Ensure that CSD group DFHDB2 was installed in the CSD. Any transaction that executes program DSN2COM1 should specify TWASIZE(twasize) on its transaction entry.
### DSN2054I
**Dynamic Plan Program Link Failed for Transaction**

**Explanation:** The attachment facility was unable to link to the dynamic plan exit program specified in DSNCRCT. The reason code provided by CICS in the EIBRESP field of the EIB is given in this message.

**System Action:** The transaction is abended with a DSNC abend.

**User Response:** Look up the eibresp value in CICS for MVS/ESA Application Programming Reference. This value was returned from CICS after the attachment facility attempted to link to the dynamic plan exit. Take appropriate action based on the eibresp. For example, if eibresp was PGMIDERR, check your RCT entry for transaction transaction to ensure that the dynamic plan exit program name (PLNPGME or PLNPGMI) is the name of a valid program known to CICS.

### DSN2055I
**Single Phase Commit Failed for Transaction**

**Explanation:** CICS requested a single phase commit from DB2, but DB2 was unable to comply.

**System Action:** The transaction is abended with a DSNC abend.

**User Response:** Contact the IBM Support Center for assistance.

### DSN2056I
**csect-name CICS Release release is DOWN LEVEL FOR THIS ATTACHMENT FACILITY**

**Explanation:** The attachment facility that you are using requires a CICS release later than Version 3 Release 3. You are using CICS Version 3 Release 3 or an earlier release. For this release of CICS, you must use the attachment facility shipped with DB2.

**System Action:** The attachment facility does not initialize.

**User Response:** Ensure that the CSD definition of the DSNC transaction specifies program DSNCCOM1. If you are initializing the attachment facility using CICS program list table (PLT) processing, ensure that your CICS PLTPI table uses program DSNCCOM0 to initialize the attach.

### DSN2059I
**csect-name CICS Attachment Facility Mismatch with Resource Control Table**

**Explanation:** The wrong macro library was used to assemble DSN2CT, the resource control table.

There are two versions of the CICS attachment facility. The version shipped with DB2 requires CICS Version 3 Release 3 or an earlier release; the one shipped with CICS requires a CICS release later than Version 3 Release 3. This error message indicates CICS is using the attachment facility shipped with CICS, but the RCT was assembled using the DB2 macro libraries.

**System Action:** The CICS attachment facility initialization terminates.

**User Response:** Reassemble DSN2CT using the DSNCRCT macro shipped in the CICS macro libraries.

### DSN2060I
**csect-name INITPARM is IGNORED BECAUSE FORMAT IS INVALID.**

**Explanation:** The DSN2STRT INITPARM specified on the CICS initialization job is incorrect. The format of the INITPARM should be:

```
INITPARM=(DSN2STRT='xx,yyyy')
```

where xx is the suffix of the RCT and yyyy is the DB2 subsystem id. The RCT suffix cannot be greater than 2 characters, and the subsystem ID cannot be greater than 4 characters.

To specify an RCT suffix only, use the format:

```
INITPARM=(DSN2STRT='xx')
```

To specify a subsystem ID override only, use the format:

```
INITPARM=(DSN2STRT='',yyyy')
```

**System Action:** The attachment facility attempts to initialize with the subsystem ID specified in the DSNC STRT command. If no subsystem ID is provided there, it attempts to initialize with the subsystem ID specified in the resource control table.

**User Response:** If you want to override the subsystem ID, restart the attachment facility using the DSNC STRT command with the correct SSID. Alternatively, you can correct the DSN2STRT INITPARM and reinitialize CICS.

### DSN2061I
**csect-name INITPARM is INVALID. ATTACHMENT FACILITY NOT STARTED.**

**Explanation:** No resource control table suffix was specified on the DSNC STRT command, and the format of the DSN2STRT INITPARM on the CICS initialization job is incorrect. The format of the INITPARM should be:

```
INITPARM=(DSN2STRT='xx,yyyy')
```

where xx is the suffix of the RCT and yyyy is the DB2 subsystem id. The RCT suffix cannot be greater than 2 characters, and the subsystem ID cannot be greater than 4 characters.

To specify an RCT suffix only, use the format:

```
INITPARM=(DSN2STRT='xx')
```

To specify a subsystem ID override only, use the format:

```
INITPARM=(DSN2STRT='',yyyy')
```

**System Action:** The attachment facility does not initialize.

**User Response:** To start the attachment facility, use the DSNC STRT command and specify a resource control table suffix on the command. Alternatively, you can correct the DSN2STRT INITPARM and reinitialize CICS.

### DSN2063I
**csect-name NOT AUTHORIZED TO START TRANSACTION transaction. ATTACHMENT FACILITY NOT STARTED**

**Explanation:** The user was not authorized to start transaction transaction.

The CICS-DB2 attachment facility starts transaction during initialization. Before it starts transaction, it checks external security (such as RACF) using CICS’s QUERY SECURITY command. When CICS returns the value NOTREADABLE for transaction, the attachment facility produces this message.

**System Action:** The attachment facility does not initialize.

**User Response:** Identify the authorization ID of the user who started the attachment facility. Use your external security product to authorize that user to start transaction.
**DSN2064I**  
`csect-name` transaction ABENDED. ATTACHMENT FACILITY IS TERMINATING.

**Explanation:** The CICS-DB2 transaction `transaction` abended.

**System Action:** The CICS-DB2 attachment facility terminates.

**System Programmer Response:** Identify the cause of the abend, correct it if necessary, and restart the attachment facility.

**DSN2065I**  
`csect-name` INVALID LENGTH. DATA NOT DISPLAYABLE.

**Explanation:** The module running under the CICS Execution Diagnostic Facility (EDF) attempted to display an input or output variable that had an incorrect length indicator.

**System Action:** EDF processing continues, but the value of the variable is not displayed.

**DSN2070I**  
`csect` ROLLBACK FAILED FOR TRANSACTION EIBRESP2 = X'eibresp2'

**Explanation:** The attachment facility was unable to issue a CICS ROLLBACK. The reason code provided by CICS in the EIBRESP2 field of the EIB is shown in `eibresp2`.

**System Action:** The transaction is abended with a DSNC abend.

**System Programmer Response:** Look up the `eibresp2` value in CICS for MVS/ESA Application Programming Reference. This value was returned from CICS after the attachment facility attempted a ROLLBACK requested by the ROLBE=YES option.

**DSN2700I**  
DSN2SAMG `message-id` HAS BEEN ISSUED

**Explanation:** This message is issued only if the requested message was not found in the message directory (DSN2MSGT).

**System Action:** The system proceeds as though the requested message was issued.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Refer to this manual for the message text.

**Problem Determination:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**DSN2901I**  
UNRECOVERABLE IOERROR IN PROGRAM DSN2COM1. THE ATTACHMENT FACILITY WILL SHUTDOWN.

**Explanation:** An attempt to retrieve data stored for program DSN2COM1 failed when CICS returned an exceptional condition of IOERR (EIBRESP = X'11').

**System Action:** The DB2-CICS attachment facility is shutdown.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** An IOERR occurs if an input or output error occurs during a RETRIEVE operation. Examine the CICS auxiliary trace records and the CICS system log to determine the cause of the IOERR.
DSN3001I  csect-name ABNORMAL DISCONNECT FROM SUBSYSTEM INTERFACE

Explanation: This message indicates that 'csect-name' detected that an online routine was still supporting SSI calls (IEFSSREQ) even though DB2 was nearly done terminating or no longer executing. This occurs with 'csect-name' DSN3RS0X when the service address space has reached end-of-memory and neither normal termination nor online error recovery routines have successfully completed termination of the DB2 subsystem. This occurs with 'csect-name' DSN3SSSTM when this condition is discovered during online termination.

System Action: The connection is terminated. All IEFSSREQ requests are handled by the DB2 ERLY code until DB2 is restarted.

Problem Determination: An SVC dump is requested. This SVC dump and associated SYS1.LOGREC entries provide information to determine which resource managers had not removed their support of particular SSI function codes.

For dumps requested by DSN3RS0X, all pertinent control blocks and stack storage are dumped. The primary control block of interest is the SSVT for DB2.

For DSN3SSSTM, the DB2 'standard dump' facility is used to dump the information necessary for problem diagnosis. The primary control blocks of interest are the 'active' CONN blocks.

System Programmer Response: The user must determine the correct recovery action to resolve the 'indoubt' situations. This involves either 'ensure-commit' or 'backout' decisions for all 'indoubt' URs.

Problem Determination: The -DISPLAY THREAD command should be used to see the URs still indoubt. It may show that all indoubt URs have already been resolved. The -RECOVER INDOUBT command should be used, either from an MVS console or through an attachment facility, to resolve the indoubt URs and to release the resources they hold.

Problem Determination: This error is probably caused by a cold start after an abnormal termination of either subsystem or by offline alterations of the logs of either subsystem.

DSN3004I  DESCRIPTOR GET FAILURE RC=X xxxxxxxx, REASON=X xxxxxxxx

Explanation: The parameter list required to create the DB2 agents under which IEFSSREQ calls are processed could not be obtained from the subsystem support subcomponent directory of internal parameters (DSNZDPRM). The RC indicates the return code received from the system parameter manager and REASON indicates the reason code (from register 0).

The return code is always 4 when this message is presented, indicating that the IEFSSREQ descriptor was not found in the subsystem support subcomponent directory. This is a system error and results in termination of the DB2 subsystem. The reason code is always 0.

System Programmer Response: Repair the master directory (DSNZPARM) and/or the DB2 program libraries, and restart the DB2 subsystem.

Problem Determination: If the problem persists, use any dumps and the console log to-diagnose the problem. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

DSN3006I  xxxx SSI FUNCTION WAS ALREADY ACTIVE WHEN ACTIVATE WAS ATTEMPTED

Explanation: An initialization sequence error has occurred. The subsystem support for SSI services resource manager (SSSS) has discovered during its initialization that another resource manager ('xxxx') has already activated the EOM or FEOT SSI call by calling DSN3AC0X. If this occurs, the error is a serious one.

System Action: Subsystem initialization is discontinued. DB2 termination occurs.

System Programmer Response: Ensure that all maintenance has been applied to the DB2 program libraries, and then restart the DB2 subsystem.

Problem Determination: If the problem persists, use any dumps and the console log to diagnose the problem. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

DSN3007I  xxxx SSI FUNCTION WAS ALREADY INACTIVE WHEN DEACTIVATE WAS ATTEMPTED

Explanation: A termination sequence error has occurred. The subsystem support for SSI services resource manager (SSSS) has discovered during its termination that another resource manager ('xxxx') has already deactivated the EOM or FEOT SSI call by calling DSN3AC0X. If this occurs, the error is a serious one.

System Action: Termination continues.

System Programmer Response: Ensure that all maintenance has been applied to the DB2 program libraries.

Problem Determination: If the problem persists, use any dumps and the console log to-diagnose the problem. If you
suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**DSN3008I**

**csect-name ABNORMAL DISCONNECT FOR PROGRAM REQUEST HANDLER(S)**

**Explanation:** This message indicates that 'csect-name' has discovered that one or more resource managers are still supporting application program calls through their program request handler, even though DB2 was almost done terminating or was no longer executing. This occurs when the system services address space has gone to end of memory and neither normal termination nor online error recovery routines have successfully completed termination of the DB2 subsystem.

**System Action:** The program request handler (PRH) connection is terminated. All application program support requests are rejected with an indication that DB2 is not up.

**System Programmer Response:** See the Problem Determination section of this message.

**Problem Determination:** An SVC dump is requested. This SVC dump and associated SYS1.LOGREC entries provide information to determine which resource managers were still supporting application program support calls. All pertinent control blocks and stack storage are dumped. The primary control block of interest is the program request handler block (PRHB).

**DSN3010I**

**csect-name PARTICIPANT OS/390 RRS IS COLD STARTING AND HAS LOST ITS LOG. OTHER RECOVERABLE RESOURCE MANAGERS MIGHT HAVE INDOUBT UNITS OF RECOVERY.**

**Explanation:** DB2 has coordinator responsibility for indoubt units of recovery and OS/390 RRS has a participant role in the unit of recovery. OS/390 RRS has cold started and has lost knowledge of indoubt units of recovery. There might be damage at OS/390 RRS Recoverable Resource Managers that also participated in the unit of recovery.

**System Action:** Processing continues.

**System Programmer Response:** Contact the database administrator.

**Database Administrator Action:** DB2 is the coordinator for one or more indoubt units of recovery at other OS/390 RRS recoverable resource managers. OS/390 RRS has lost all knowledge of these units of recovery. The participant OS/390 RRS Recoverable Resource Managers might still have indoubt units of recovery. DB2 has no knowledge of other OS/390 RRS Recoverable Resource Manager except for the OS/390 RRS unit of recover ID (URID) that identifies such a unit of recovery. Subsequent DSN3017I, DSN3018I or DSN3019I messages describe the status of each unit of recovery and contain the OS/390 RRS URID for each.

**DSN3011I**

**csect-name COORDINATOR OS/390 RRS IS COLD STARTING AND HAS LOST ITS LOG. INDOUBT DB2 THREADS NEED MANUAL RESOLUTION.**

**Explanation:** DB2 has participant responsibility for indoubt threads. OS/390 RRS, the commit coordinator, has informed DB2 that it lost all knowledge of DB2 indoubt threads. The indoubt threads at this DB2 must be manually resolved with the RECOVER INDOUBT command.
DSN3014I  csect-name DB2 HAS NO KNOWLEDGE OF
RRS URID=rs_urid. THE RRS UR IS INDOUBT.
THE DB2 URID RECORDED BY RRS=db2_urid.

Explanation: DB2 is restarting with OS/390 RRS where DB2
is a participant and OS/390 RRS is the coordinator. OS/390
RRS has a unit of recovery that DB2 should be a participant in,
but DB2 has no knowledge of the OS/390 RRS unit of
recovery. The OS/390 RRS unit of recovery ID is 'rs_urid'.
OS/390 RRS has recorded the DB2 unit of recovery ID as
'db2_urid'.

System Action: Restart with OS/390 RRS continues.

Operator Response: Notify the database administrator.

Database Administrator Action: This message might indicate
a DB2 or OS/390 RRS problem, or it might be produced
normally because of one of the following:

- A DB2 conditional restart was performed that resulted in
  the loss of part or all of the DB2 log. This conditional
  restart might have happened at any time in the past.
- The DB2 RECOVER INDOUBT command was used to
  resolve the DB2 unit of recovery with URID 'db2_urid'.

If either of these occurred, the message can be ignored. If
neither occurred, there might be a DB2 or an OS/390 RRS
problem. If the 'db2_urid' appears to be a valid log RBA, use
the DSN1LOGP utility with the SUMMARY option and URID
options using the 'db2-urid' value. If DSN1LOGP finds the
'db2-urid', the disposition will indicate whether the DB2 UR was
committed or aborted (rolled back). Use the OS/390 RRS ISPF
interface to commit or abort the OS/390 RRS URID to avoid
heuristic damage.

Problem Determination: If you suspect an error in DB2, refer
to Section 3 of DB2 Diagnosis Guide and Reference for infor-
mation on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B.

Problem determination on page 1051 1, 6, 33. 72.

DSN3016I  csect-name RRS HAS LOST DATA FROM ITS
LOG.

Explanation: DB2 is restarting with OS/390 RRS and OS/390
RRS has lost some portion of its log.

System Action: Restart with RRS continues.

Operator Response: Notify the database administrator.

Database Administrator Action: DB2 might not be able to
resolve indoubt Units of Recovery successfully with RRS
because of the loss of RRS log data. This message might be
followed by one or more of the following messages: DSN3017I,
DSN3018I, DSN3019I, DSN3020I, DSN3021I, DSN3022I and DSN3023I.

DSN3017I  csect-name RRS HAS NO KNOWLEDGE OF
DB2 URID=db2_urid. THE DB2 UR IS INDOUBT. THE RRS URID RECORDED
BY DB2=rs_urid.

Explanation: DB2 is restarting with OS/390 RRS where DB2
is the coordinator and OS/390 RRS is the participant. DB2 has
a unit of recovery that OS/390 RRS should be a participant in,
but OS/390 RRS has no knowledge of the DB2 unit of
recovery. The DB2 unit of recovery ID is 'db2_urid'. DB2 has
recorded the OS/390 RRS unit of recovery ID as 'rs_urid'.

System Action: Restart with OS/390 RRS continues.

Operator Response: Notify the database administrator.

Database Administrator Action: This message might indicate
a DB2 or OS/390 RRS problem, or it might be produced
normally because of one of the following:

- An OS/390 RRS cold start was performed that resulted in
  the loss of the OS/390 RRS log. In this case, message
  DSN3010I should have been produced.
- OS/390 RRS might have had a partial loss of log data
during restart. In this case, message DSN3016I should
  have been produced.
- The OS/390 RRS ISPF interface might have been used to
  heuristically commit or roll back the UR.

If any of the above are true, the message can be ignored. If
not, there might be a DB2 or an OS/390 RRS problem.

Problem Determination: If you suspect an error in DB2, refer
to Section 3 of DB2 Diagnosis Guide and Reference for infor-
mation on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B.

Problem determination on page 1051 1, 6, 33. 72.
Problem Determination: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051.

---

**DSN3018I**

* csect-name RRS HAS NO KNOWLEDGE OF DB2 URID=db2.urid. THE DB2 UR WAS COMMITTED. THE RRS URID RECORDED BY DB2=rrs.urid.

*Explanation:* DB2 is restarting with OS/390 RRS where DB2 is the coordinator and OS/390 RRS is a participant. DB2 has a unit of recovery that OS/390 RRS should be a participant in, but OS/390 RRS has no knowledge of the DB2 unit of recovery. The DB2 unit of recovery ID is 'db2.urid'. DB2 has recorded the OS/390 RRS unit of recovery ID as 'rrs.urid'.

*System Action:* Restart with OS/390 RRS continues.

*Operator Response:* Notify the database administrator.

*Database Administrator Action:* This message might indicate a DB2 or OS/390 RRS problem, or it might be produced normally because of one of the following:

- An OS/390 RRS cold start was performed that resulted in the loss of the OS/390 RRS log. In this case, message DSN3010I should have been produced.
- OS/390 RRS might have had a partial loss of log data during restart. In this case, message DSN3016I should have been produced.
- The OS/390 RRS ISPF interface might have been used to heuristically commit or roll back the UR.

If any of the above are true, the message can be ignored. If not, there might be a DB2 or an OS/390 RRS problem.

**Problem Determination:** If possible, insure that the DB2 UR is resolved to abort. If this is done, there will be no heuristic damage. If the DB2 UR is resolved to abort, heuristic damage will have occurred since OS/390 RRS committed the same UR.

---

**DSN3019I**

* csect-name RRS HAS NO KNOWLEDGE OF DB2 URID=db2.urid. THE DB2 UR WAS ROLLED BACK. THE RRS URID RECORDED BY DB2=rrs.urid.

*Explanation:* DB2 is restarting with OS/390 RRS where DB2 is the coordinator and OS/390 RRS is a participant. DB2 has a unit of recovery that OS/390 RRS should be a participant in, but OS/390 RRS has no knowledge of the DB2 unit of recovery. The DB2 unit of recovery ID is 'db2.urid'. DB2 has recorded the OS/390 RRS unit of recovery ID as 'rrs.urid'.

*System Action:* Restart with OS/390 RRS continues.

*Operator Response:* Notify the database administrator.

*Database Administrator Action:* This message might indicate a DB2 or OS/390 RRS problem, or it might be produced normally because of one of the following:

- An OS/390 RRS cold start was performed that resulted in the loss of the OS/390 RRS log. In this case, message DSN3010I should have been produced.
- OS/390 RRS might have had a partial loss of log data during restart. In this case, message DSN3016I should have been produced.
- The OS/390 RRS ISPF interface might have been used to heuristically commit or roll back the UR.

If any of the above are true, the message can be ignored. If not, there might be a DB2 or an OS/390 RRS problem.

**Problem Determination:** If possible, insure that the DB2 UR is resolved to abort. If this is done, there will be no heuristic damage. If the DB2 UR is resolved to abort, heuristic damage will have occurred since OS/390 RRS committed the same UR.

---

**DSN3020I**

* csect-name POSSIBLE HEURISTIC DAMAGE. RRS HAS COMMITTED THE UR WITH RRS URID=rrs.urid. THE DB2 UR WITH DB2 URID=db2.urid IS INDOUBT.

*Explanation:* DB2 is restarting with OS/390 RRS and has a unit of recovery (UR) DB2 URID=db2.urid that is indoubt. DB2 is the commit coordinator for the UR and OS/390 RRS is a participant. OS/390 RRS has committed the same UR. The OS/390 RRS URID=rrs.urid.

*System Action:* Restart with OS/390 RRS continues.

*Operator Response:* Notify the database administrator.

*Database Administrator Action:* If possible, insure that the DB2 UR is resolved to commit. If this is done, there will be no heuristic damage. If the DB2 UR is resolved to commit, heuristic damage will have occurred since OS/390 RRS committed the same UR.

**Problem Determination:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

---

**DSN3021I**

* csect-name POSSIBLE HEURISTIC DAMAGE. RRS HAS ROLLED BACK THE UR WITH RRS URID=rrs.urid. THE DB2 UR WITH DB2 URID=db2.urid IS INDOUBT.

*Explanation:* DB2 is restarting with OS/390 RRS and has a unit of recovery (UR) DB2 URID=db2.urid that is indoubt. DB2 is the commit coordinator for the UR and OS/390 RRS is a participant. OS/390 RRS has rolled back the same UR. The OS/390 RRS URID=rrs.urid.

*System Action:* Restart with OS/390 RRS continues.

*Operator Response:* Notify the database administrator.

*Database Administrator Action:* If possible, insure that the DB2 UR is resolved to abort. If this is done, there will be no heuristic damage. If the DB2 UR is resolved to abort, heuristic damage will have occurred since OS/390 RRS rolled back the same UR.

**Problem Determination:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

---

**DSN3022I**

* csect-name HEURISTIC DAMAGE HAS OCCURRED. RRS HAS COMMITTED THE UR WITH RRS URID=rrs.urid, AND DB2 HAS ROLLED BACK THE SAME UR. THE DB2 URID=db2.urid

*Explanation:* DB2 is restarting with OS/390 RRS and has a unit of recovery (UR) with DB2 URID=db2.urid that was rolled back. DB2 is the commit coordinator for the UR and OS/390 RRS is a participant. OS/390 RRS has committed the same UR. The OS/390 RRS URID=rrs.urid.

*System Action:* Restart with OS/390 RRS continues.

*Operator Response:* Notify the database administrator.

*Database Administrator Action:* Heuristic damage has occurred since DB2 rolled back the UR and OS/390 RRS has committed the same UR. Correct the damage. This is not an easy task. Knowledge of the application is required to determine which Recoverable Resource Managers are involved in the UR. Since the time of the heuristic action, the data that was updated might have been used by many applications - read and/or write. Correcting the damage might involve...
reversing the effects of these applications as well. Tools available are:

- The OS/390 RRS ISPF functions can provide assistance in determining the set of resource managers involved and what action they took.
- The DB2 DSN1LOGP utility provides a summary report that identifies the table spaces modified by the unit of recovery.

Contact your IBM Support Center for further assistance.

**DSN3023I**  csect-name HEURISTIC DAMAGE HAS OCCURRED. RRS HAS ROLLED BACK THE UR WITH RRS URID=rrs_urid, AND DB2 HAS COMMITTED THE SAME UR. THE DB2 URID=db2_urid

**Explanation:** DB2 is restarting with OS/390 RRS and has a unit of recovery (UR) with DB2 URID=db2_urid that was committed. DB2 is the commit coordinator for the UR and OS/390 RRS is a participant. OS/390 RRS has rolled back the same UR. The OS/390 RRS URID=rrs_urid.

**System Action:** Restart with OS/390 RRS continues.

**Operator Response:** Notify the database administrator.

**Database Administrator Action:** Heuristic damage has occurred since DB2 committed the UR and OS/390 RRS has rolled back the same UR. Correct the damage. This is not an easy task. Knowledge of the application is required to determine which Recoverable Resource Managers are involved in the UR. Since the time of the heuristic action, the data that was updated might have been used by many applications - read and/or write. Correcting the damage might involve reversing the effects of these applications as well. Tools available are:

- The OS/390 RRS ISPF functions can provide assistance in determining the set of resource managers involved and what action they took.
- The DB2 DSN1LOGP utility provides a summary report that identifies the table spaces modified by the unit of recovery.

Contact your IBM Support Center for further assistance.

**DSN3024I**  csect_name HEURISTIC DAMAGE HAS OCCURRED. COORDINATOR DB2 HAS COMMITTED THE UR WITH DB2 URID=db2_urid, AND RRS HAS INDICATED THAT THE OUTCOME WAS MIXED. THE RRS URID=rrs_urid.

**Explanation:** DB2 is the commit coordinator and OS/390 RRS is a participant. DB2 committed the UR with URID = db2_urid and OS/390 RRS has indicated that one or more Recoverable Resource Managers that participated in the OS/390 RRS UR with URID = rrs_urid has committed the same UR.

**System Action:** Processing continues.

**Operator Response:** Notify the database administrator.

**Database Administrator Action:** Heuristic damage has occurred since DB2 committed the UR and at least one OS/390 RRS Recoverable Resource Manager has rolled back the same UR. Correct the damage. This is not an easy task. Knowledge of the application is required to determine which Recoverable Resource Managers are involved in the UR. Since the time of the heuristic action, the data that was updated might have been used by many applications - read and/or write. Correcting the damage might involve reversing the effects of these applications as well. Tools available are:

- The OS/390 RRS ISPF functions can provide assistance in determining the set of resource managers involved and what action they took.
- The DB2 DSN1LOGP utility provides a summary report that identifies the table spaces modified by the unit of recovery.

Contact your IBM Support Center for further assistance.

**DSN3025I**  csect-name HEURISTIC DAMAGE HAS OCCURRED. COORDINATOR DB2 HAS ROLLED BACK THE UR WITH DB2 URID=db2_urid, AND RRS HAS INDICATED THE OUTCOME WAS MIXED. THE RRS URID=rrs_urid.

**Explanation:** DB2 is the commit coordinator and OS/390 RRS is a participant. DB2 rolled back the UR with URID = db2_urid and OS/390 RRS has indicated that one or more Recoverable Resource Managers that participated in the OS/390 RRS UR with URID = rrs_urid has committed the same UR.

**System Action:** Processing continues.

**Operator Response:** Notify the database administrator.

**Database Administrator Action:** Heuristic damage has occurred since DB2 committed the UR with URID=db2_urid and OS/390 RRS has indicated that at least one OS/390 RRS Recoverable Resource Manager has not completed commit processing for the OS/390 RRS UR with URID=rrs_urid.

**System Action:** Processing continues.

**Operator Response:** Notify the database administrator.

**Database Administrator Action:** If possible, insure that the OS/390 RRS Recoverable Resource Manager commits the OS/390 RRS UR. If this is done, there will be no heuristic...
damage. If the OS/390 RRS UR is rolled back by the OS/390 RRS Recoverable Resource manager, heuristic damage will have occurred since DB2 committed the same UR.

**DSN3027I** csect-name POSSIBLE HEURISTIC DAMAGE. COORDINATOR DB2 HAS ROLLED BACK THE UR WITH URID=db2_urid, AND RRS HAS INDICATED THAT THE OUTCOME IS PENDING. THE RRS URID=rrs_urid.

**Explanation:** DB2 is the commit coordinator for the DB2 UR with URID=db2_urid and OS/390 RRS is a participant. OS/390 RRS has also rolled back the UR but has indicated that at least one OS/390 RRS Recoverable Resource manager has not completed roll back processing for the OS/390 RRS UR with URID=rrs_urid.

**System Action:** Processing continues.

**Operator Response:** Notify the database administrator.

**Database Administrator Action:** If possible, insure that the OS/390 RRS Recoverable Resource Manager rolls back the OS/390 RRS UR. If this is done, there will be no heuristic damage. If the OS/390 RRS UR is committed by the OS/390 RRS Recoverable Resource Manager, heuristic damage will have occurred since DB2 rolled back the same UR.

**DSN3100I** csect-name SUBSYSTEM ssnm READY FOR START COMMAND

**Explanation:** This message is issued by CSECT DSN3RRSR when DB2 subsystem initialization is complete. The ‘ssnm’ in the message is the name of the subsystem that issued the message. This occurs during MVS IPL processing. The message is also issued by CSECT DSN3EC0Xafter termination of the previous execution of DB2 is complete. Message DSN3104I is also issued during this processing.

**Operator Response:** Issue the -START command when DB2 execution is desired.

**DSN3101I** csect-name INVALID EARLY PROCESSING MODULE NAME IN PARMLIB RECORD. ssnm IS NOT AVAILABLE

**Explanation:** CSECT DSN3UR00 has discovered that a parameter passed to DB2 subsystem initialization is in error. Either the Early processing load module name is not between 1 and 8 characters long, or there are syntax errors in the parameter string. The entire parameter string must be between 3 and 10 characters long, and the next to the last character must be a '. The parameters were obtained from the parameter fields of a record defining a DB2 subsystem in member IEFFSNxx of SYS1.PARMLIB.

The subsystem recognition character is not inserted in this message as it is not yet known. ‘ssnm’ is the name of the DB2 subsystem undergoing IPL-time initialization.

**System Action:** The DB2 subsystem with the indicated name is not available for this IPL of MVS.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Identify the cause of the error. Either correct the early processing load module or take the necessary steps to include the module in a link-listed library. Re-IPL MVS. Refer to Section 2 of DB2 Installation Guide for the format of an IEFFSNxx record which defines a DB2 subsystem.

**Problem Determination:** An entry is made to SYS1.LOGREC. No SVC dump is taken.

**DSN3102I** csect-name UNABLE TO LOAD EARLY PROCESSING MODULE SPECIFIED IN PARMLIB RECORD. ssnm IS NOT AVAILABLE

**Explanation:** CSECT DSN3UR00 is unable to load the early processing load module named in the first parameter passed to DB2 subsystem IPL initialization. ‘ssnm’ is the name of the DB2 subsystem undergoing IPL-time initialization.

Either the load module name was specified incorrectly or the load module does not reside in a library included in the MVS linklist.

**System Action:** DSN3UR00 abends with code X’04E’ and reason code X’00F30103’. The DB2 subsystem with the indicated name is not available for this IPL of MVS.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Identify the cause of the error. Either correct the early processing load module or take the necessary steps to include the module in a link-listed library. Re-IPL MVS. Refer to Section 2 of DB2 Installation Guide for the format of an IEFFSNxx record which defines a DB2 subsystem. Refer to the appropriate MVS publication for MVS linklist requirements.

**Problem Determination:** An entry is made to SYS1.LOGREC. No SVC dump is taken.

**DSN3104I** csect-name - TERMINATION COMPLETE

**Explanation:** This message indicates that a DB2 subsystem has terminated. The actual MVS termination of the DB2 address space(s) may have completed earlier. This message is presented for every termination, normal or abnormal.

**Operator Response:** Issue a DISPLAY ACTIVE command to see if MVS has completed termination processing of the address space(s).
**DSN3105I**  csect-name - UNABLE TO LOAD EARLY PROCESSING MODULE 'DSN3EPX' ssnm IS NOT AVAILABLE

Explanation: CSECT DSN3UR00 is unable to load the early processing module DSN3EPX required for MVS. The name of the DB2 subsystem undergoing IPL-time initialization is 'ssnm'. Either the load module has been inadvertently deleted, or does not reside in a library included in the MVS linklist.

System Action: DSN3UR00 abends with code X'04E' and reason code X'00F30105'. DB2 subsystem 'ssnm' is not available for this IPL of MVS.

Operator Response: Notify the system programmer.

System Programmer Response: Identify the cause of the error. Either correct the early processing load module or take the necessary steps to include the module in a link-listed library. Re-IPL MVS.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: An entry is made in SYS1.LOGREC. No SVC dump is taken. Refer to MVS linklist requirements in MVS/ESA JES2 Initialization and Tuning Guide.

Collect the following diagnostic items listed in Appendix B on page 1051: 1, 5.

**DSN3106I**  csect-name SUBSYSTEM STOPPED. THIS COMMAND NOT PROCESSED: command-text

Explanation: A command has been received which cannot be processed due to one of the following:

- The DB2 subsystem has not been started.
- The command was queued for processing while DB2 was starting, but startup terminated with an error.
- DB2 terminated before the command could be processed.

System Action: The command is not processed.

Operator Response: Start the DB2 subsystem, then reenter the command.

**DSN3107I**  csect-name COMMAND REJECTED. REQUESTER NOT AUTHORIZED

Explanation: CSECT DSN3EC0X has discovered that the source of the command was a console that does not have 'system' authority.

System Action: The command is not processed. This message is sent to the console that entered the command.

Operator Response: Enter the command from another console that has 'system' authority.

System Programmer Response: Verify that this console should be used for entering DB2 commands. If so, authorize it for 'system' commands by using MVS services.

**DSN3108I**  csect-name COMMAND REJECTED. COMMAND FACILITY PATH UNAVAILABLE

Explanation: CSECT DSN3EC0X has discovered that the path from MVS consoles to the DB2 command processor is unavailable. It may still be possible to enter commands through one of the attachment facilities.

System Action: The command is not processed. This message is delivered to the console that entered the command.

System Programmer Response: The console command facility is available again the next time DB2 is started. If it is necessary to regain this facility immediately, DB2 should be canceled and restarted.

**DSN3109I**  csect-name - UNABLE TO OBTAIN SUBSYSTEM AFFINITY TABLE INDEX FOR SUBSYSTEM ssnm. IEFSSREQ RC = nn

Explanation: CSECT DSN3UR00 was unable to obtain a subsystem affinity table index for the named subsystem. MVS did not recognize the named subsystem name as a known subsystem. If this message is issued, a serious error has occurred in MVS or DB2.

In the message, 'ssnm' is the return code from the IEFSSREQ MVS service. 'ssnm' is the name of the DB2 subsystem undergoing IPL-time initialization.

System Action: DSN3UR00 abends with completion code X'04E' and reason code X'00F30104'. The DB2 subsystem with the indicated name is not available for this IPL of MVS.

Operator Response: Notify the system programmer.

System Programmer Response: Try to re-IPL. If the problem persists, follow standard DB2 problem reporting procedures.

Problem Determination: A record is written to SYS1.LOGREC. No SVC dump is taken. Return codes from IEFSSREQ are documented under control block SSOB in the appropriate MVS publication.

**DSN3111I**  csect-name LOAD MODULE module-name DOES NOT HAVE AMODE(31) ATTRIBUTE. ssnm IS NOT AVAILABLE

Explanation: The DB2 program which establishes DB2 as an MVS subsystem during Master Scheduler initialization has determined that either its own load module or a load module loaded by it does not have the linkage editor attributes AMODE(31) and RMODE(ANY). Most DB2 load modules must be capable of running in the 31-bit addressing mode.

In the message, 'csect-name' is the name of the program detecting the error, 'module-name' is the name of the first load module found with an invalid AMODE attribute, and 'ssnm' is the name of the DB2 subsystem undergoing IPL-time initialization.

System Action: Program DSN3UR00 abends with a code of X'04E' and a reason code of X'00F30111'. The DB2 subsystem named 'ssnm' is not initialized. The subsystem will not be available until the error is corrected and MVS is re-IPLed.

Operator Response: Notify the system programmer of the failure.

System Programmer Response: Verify that all of the following were done:
• The installation and maintenance activities against DB2 were executed using SMP.
• The JCLIN for SMP included the correct AMODE and RMODE control statements.
• The appropriate Linkage Editor provided with the Data Facility Product (DFP) for the version of MVS being used was invoked by SMP for the link-edit steps.
Correct and rerun the procedure or JCL which caused the error. If necessary, REJECT all SMP APPLY steps which were executed incorrectly and rerun the rejected steps. Request a re-IPL of MVS.

Problem Determination: A record is written to SYS1.LOGREC. No SVC dump is taken.
The MVS service aid AMBLIST provides Linkage Editor module attributes in the summary section of the LISTLOAD function output.

DSN3112I csect-name ENABLE TO REGISTER COMMAND PREFIX, CPF RETURN CODE = xxxyy. ssnm IS NOT AVAILABLE

Explanation: DB2 is unable to register the installation-specified command prefix with MVS. The command prefix is specified in the subsystem definition parameter. xx is the hexadecimal return code, and yy is the hexadecimal reason code from the CPF MVS service. Subsystem ssnm is not available.

System Programmer Response: This DB2 subsystem is not available.

System Programmer Response: Refer to the MVS documentation on the CPF macro service to determine the reason for the xx and yy codes. Ensure that the specified command prefix is not already registered, or is not a substring of an already registered command prefix. Use the MVS DISPLAY ODPDATA command, if necessary, to see command prefixes registered with MVS.

DSN3113I csect-name INVALID SUBSYSTEM DEFINITION PARAMETER IN PARMLIB RECORD. ssnm IS NOT AVAILABLE.

Explanation: DB2 detected an error in the subsystem definition parameter, which is obtained from the IEFSSNxx member of SYS1.PARMLIB. Some possible causes for this error are:
• The early processing load module name is not between 1 and 8 characters long.
• The command prefix is not between 1 and 8 characters long.
• The command prefix scope is not 1 character long.
• The command prefix scope is not X, S, or M.
• The group attach name is not between 1 and 4 characters long.
The command prefix is not inserted into this message because it is unknown. The name of the subsystem attempting to initialize is ssnm.

System Action: The DB2 subsystem is not available.

System Programmer Response: Correct the subsystem definition parameter and re-IPL MVS. Refer to DB2 Installation Guide for the format of the subsystem definition parameter that defines a DB2 subsystem.

DSN3114I csect-name GROUP ATTACH NAME IS NOT ALLOWED WITH THIS RELEASE OF MVS. ssnm IS NOT AVAILABLE

Explanation: DB2 found an installation-specified group attachment name specified in the subsystem definition parameter, IEFSSNxx, but DB2 group attachment is not supported with this release of MVS. DB2's group attachment feature requires MVS/ESA SP4.2.2 or a later release. The DB2 subsystem ssnm is not available.

System Programmer Response: Delete the group attachment name in the subsystem definition parameter and re-IPL.

DSN3115I csect-name UNABLE TO REGISTER GROUP ATTACH NAME, NAME/TOKEN RC = xx. ssnm IS NOT AVAILABLE

Explanation: DB2 is unable to register the installation-specified group attach name with MVS. The group attach name is specified in the subsystem definition parameter. xx is the hexadecimal return code from the MVS Name/Token service. Subsystem ssnm is not available.

System Action: This DB2 subsystem is not available.

System Programmer Response: Refer to MVS documentation about the Name/Token macro service to determine the reason for the xx return codes.

DSN3116I csect-name THE VERSION OF THE DB2 EARLY CODE IS INCOMPATIBLE WITH THIS VERSION OF MVS. ssnm IS NOT AVAILABLE

Explanation: This version of DB2 early code requires MVS/ESA 4.2.0. Subsystem ssnm is not available.

System Programmer Response: The version of the DB2 early code that was loaded from the LINKLIST library is not compatible with the release of MVS that you are using. Change the concatenation order of the LINKLIST library so that a compatible release of DB2 early code is used.

DSN3201I ABNORMAL EOT IN PROGRESS FOR USER=xxxxxxxx CONNECTION-ID=yyyyyyyyy CORRELATION-ID=zzzzzzzzzzzz JOBNAME=aaaaaaa TCB=99999999

Explanation: Abnormal termination started for the agent with the values shown for USER, CONNECTION-ID, CORRELATION-ID, JOBNAME and TCB address. These values are the last known set of identifiers for the terminating agent.
The abnormal termination could be the result of a failure in the allied agent’s address space or the result of an operator cancel command.
The value for the USER and/or CORRELATION-ID might be blank. If the terminating agent is connected to DB2 at the IDENTIFY level and was not previously signed on, or was not previously authorized to a plan at the time of the failure, then no CORRELATION-ID is associated with the agent. Otherwise, the values for the USER, CONNECTION-ID, CORRELATION-ID, and JOBNAME are the last values established to DB2 for this connection. They might represent the current activity of the agent. The TCB value is the address of the TCB that is terminating. Previous DB2 work by this agent might have completed successfully. Correlation IDs beginning with ‘Onn‘, where nn is a number from 01 to 28, identify system agents.
**System Action:** The agent was previously queued to a System Services service task for termination processing. This message indicates that the agent was taken from the queue for processing. Any uncommitted database changes are rolled back.

**User Response:** Your job or TSO session cannot be canceled. The PA1 key has no effect in this circumstance. To avoid long waits when your application program is canceled or terminates abnormally, issue frequent commits.

**System Programmer Response:** See the Problem Determination section for this message. The MVS CANCEL and FORCE commands have no effect and should not be issued. DB2 should not be canceled. If an extensive rollback is in progress, the subsequent DB2 restart might take a very long time because of additional log activity.

**Problem Determination:** You can detect a deferred termination condition for a task by examining several indicators. Some or all of the following might be present:

- The allied address space might be swapped out and appear to be in a never-ending WAIT condition.
- The MVS commands CANCEL and FORCE appear to have no effect.
- The allied task holds an MVS-shared ENQ on resource SYSZDSN3.ERLYOLRHerly-block-address.
- During abnormal termination of the agent associated with the failing task, but before this message was written, the task’s connection appears on the -DISPLAY THREAD output with a QD status. See message DSNV404I for the definition of this status code.
- This message, DSN3201I, is written to the MVS console after the agent is removed from the service task work queue when termination processing begins.
- During abnormal termination of the agent associated with the failing task, the task’s connection appears on the -DISPLAY THREAD output with a D status. See message DSNV404I for the definition of this status code.

**DSN3458I**

**csect-name MODULE modname** MUST HAVE THE AMODE (31) ATTRIBUTE

**Explanation:** An authorization exit load module was not link-edited with the 31-bit addressing mode (AMODE) attribute. Either load module DSN3@ATH or DSN3@SGN is specified by ‘modname’.

**System Action:** Subsystem startup is terminated.

**System Programmer Response:** Relink-edit the authorization exit module specifying the attributes AMODE(31), RMODE(ANY).

**Problem Determination:** Check the load module attributes used for the link-edit.

**DSN3580I**

**CONNECTION FOR [EOM | FEOT | IDEN]** GAVE RC=X xxxxxxxx, REASON=X xxxxxxxx

**Explanation:** A nonzero return code has been returned to DSN3AMI2 from the SSSS connect to subsystem interface call. The variables in the message indicate which SSI call is involved and the actual return and reason codes associated with it.

**System Action:** The current task (TCB) is abended with a system completion code of X‘04E’ and with an abend reason code of ‘00F30580’ The DB2 subsystem terminates.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Restart the DB2 subsystem.

**Problem Determination:** The trace table and stack storage associated with the EB in register 6 must be examined to locate the error.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 2, 5.
DSN7... Messages

**DSN7000I** csect-name REQUIRED CSECT DSN6GRP COULD NOT BE FOUND IN SYSTEM PARAMETERS LOAD MODULE.

**Explanation:** The required CSECT DSN6GRP was not found in the system parameters load module.

**System Action:** The DB2 subsystem terminates with reason code 00F70001.

**Operator Response:** Restart DB2 with the correct system parameters load module.

**System Programmer Response:** Reassemble the system parameters load module and include the DSN6GRP macro.

**DSN7001I** csect-name DATA SHARING SPECIFIED IN SYSTEM PARAMETERS, BUT NOT RUNNING ON A MVS SYSTEM LEVEL WHICH IS REQUIRED FOR DATA SHARING.

**Explanation:** A DB2 subsystem was started with the data sharing option, but MVS is not at the required level. DB2 data sharing requires MVS Version 5 Release 1.0 or a later release.

**System Action:** The DB2 subsystem terminates with reason code 00F70002.

**Operator Response:** Restart DB2 on MVS Version 5 Release 1.0 or a later release.

**DSN7100I** csect-name

**Explanation:** This message indicates the beginning of the output from a DISPLAY GROUP command. It is the first line of a multi-line message response.

**DSN7101I** *** BEGIN DISPLAY OF GROUP(group-name) GROUP LEVEL(group-level)

**Explanation:** This message is a line of output from a DISPLAY GROUP command.

- **group-name** is the name of the data sharing group.
- **group-level** is a string of three numeric characters:
  - Version
  - Release
  - Modification level

**DSN7102I** MEMBER ID SUBSYS CMDPREF STATUS LVL NAME SUBSYS IRLMPROC

**Explanation:** This message is a line of output from a DISPLAY GROUP command.

- **MEMBER** Name of the DB2 data sharing member.
- **ID** Internally assigned ID for each data sharing member.
- **SUBSYS** Subsystem name of the data sharing member.
- **CMDPREF** Command prefix of the data sharing member.
- **STATUS** State of the data sharing member which can be 'ACTIVE', 'FAILED', 'QUIESCED', 'QI', 'QR', 'QC', 'QIC', 'QIR', or 'QICR' where:
  - Active status means the member is currently up and running.
  - Failed status means the member has terminated abnormally.
  - Quiesced status means the member is down normally.
  - QI status means the member is down with indoubt URs.
  - QR status means the member is down with resynchronization responsibility.
  - QC status means the member is down with group buffer pool castout responsibility.
  - QICR is a possible combination of the above quiesced states.
- **SYSTEM NAME** Name of the MVS system on which the data sharing member runs.
- **LVL** String of three numeric characters as follows:
  - DB2 Version
  - DB2 Release
  - DB2 Modification level
- **IRLM SUBSYS** The accompanied IRLM's subsystem name for this DB2.
- **IRLMPROC** The accompanied IRLM's startup procedure name.

**DSN7105I** ------ --- ---- -------- -------- --- -------- ---- --------

**Explanation:** This message is a line of output from a DISPLAY GROUP command.

**DSN7106I** member-name subsystem-name command-prefix member-status mvs-system-name irm-subsystem-name irm-procedure-name

**Explanation:** This message is a line of output from a DISPLAY GROUP command. The member-status can be ACTIVE, QUIESCED, or FAILED.

- **QUIESCED** This is a normal quiesced state, as the result of a normal STOP DB2 command.
- **Q** The member is quiesced, but with additional conditions. Q (quiesced) can be paired with one or more of the following letters:
  - Indoubt units of recovery (URs) are outstanding. This means retained locks are held.
There was a castout error. The last updated of the page set or partition could not write from the coupling facility to DASD.

Make sure there is connectivity from the coupling facility to DASD before restarting DB2.

There is retained information needed for DB2 to perform resynchronization with one or more remote locations.

When DB2 is restarted, this resynchronization occurs.

ACTIVE
This is a normal active state without conditions.

A
The member is active, but with the additional conditions. A (active) can be paired with the following letter:

I
Indoubt or postponed abort units of recovery (URs) are outstanding. This means retained locks are held.

The subsystem-name, command-prefix, irlm-subsystem-name, and irlm-procedure-name show **** if this information is unknown.

GROUP ATTACH NAME(group-attach)
Explanation: This message is a line of output from a DISPLAY GROUP command.
group-attach is the group attach name for the data sharing group.

NUMBER LOCK ENTRIES: nnnnnnnnnn
Explanation: This line of output from a DISPLAY GROUP command shows information about the LOCK1 coupling facility structure. The maximum number of lock table entries is displayed.

SCA STRUCTURE SIZE: nnnnnnnn KB, STATUS = xx, SCA IN USE: < nnn %
Explanation: This message is a line of output from a DISPLAY GROUP command.
If the % value is > 0 but < 1, then a "<" character is shown before the 1 % value, e.g. "< 1 %". This can happen if the shared communications area (SCA) structure is very large or if only a small number of SCA entries are in use.
The SCA status can have following values:

IN SCA is in initialization phase.
AC SCA is active.
DS SCA loss of connectivity, delayed action started.
DC SCA loss of connectivity, delayed action completed.
QS SCA rebuild quiesce function started.
QC SCA rebuild quiesce function completed.
CS SCA rebuild connect function started.
CC SCA rebuild connect function completed.
OS SCA rebuild connect complete function started.
RS SCA rebuild resource manager invocation started.
RC SCA rebuild resource manager invocation completed.
OC SCA rebuild connect complete function completed.
LS SCA rebuild cleanup function started.
US SCA rebuild resource manager invocation started.
UC SCA rebuild resource manager invocation completed.
LC SCA rebuild cleanup function completed.
PS SCA rebuild process complete function started.
PC SCA rebuild process complete function completed.
SS SCA rebuild stop function started.
SC SCA rebuild stop function completed.
ES SCA rebuild stop complete function started.
EC SCA rebuild stop complete function completed.
VS SCA volatility change function started.
VC SCA volatility change function completed.
TE SCA is in termination phase.

LOCK1 STRUCTURE SIZE: nnnnnnnn KB, LOCK1 IN USE: < nnn %
Explanation: This line of output from a DISPLAY GROUP command shows the size and the % in use value of the LOCK1 coupling facility structure.
If the % value is > 0 but < 1, then a "<" character is shown before the 1 % value, e.g. "< 1 ". This can happen if the LOCK1 structure is very large or only a small number of LOCK1 entries are in use. The % value shown is based on the largest value of either "lock entries in use" or "list entries in use".

NUMBER LIST ENTRIES: nnnnnnnnnn, LIST ENTRIES IN USE: < nnnnnnnnnn
Explanation: This line of output from a DISPLAY GROUP command shows information about the LOCK1 coupling facility structure. The maximum number of modify lock list entries and the number of those entries currently in use are displayed.
(MVS documentation refers to these list entries as "record data.")

END DISPLAY OF GROUP(group-name)
Explanation: This message is the last line of output from a DISPLAY GROUP command.

DISPLAY TERMINATED DUE TO INSUFFICIENT MESSAGE SPACE.
Explanation: There is not enough storage available to store the required information from this command.
System Action: The DB2 subsystem displays the group information, but some information is missing.
**Explanation:** An error occurred during the query of the cross-system coupling facility (XCF) or CF structure information. nnnnnnn could be IXCQUERY or IXLG.

**System Action:** The DB2 subsystem displays the group, but some XCF or coupling facility structure information is missing. Refer to MVS/ESA Programming: Sysplex Services Reference for an explanation of IXCQUERY or IXLG return and reason codes.

---

**Explanation:** This message is a line of output from a DISPLAY GROUP command with the DETAIL option.

**System Action:** The DB2 subsystem displays the group, but some XCF or coupling facility structure information is missing. Refer to MVS/ESA Programming: Sysplex Services Reference for an explanation of IXCQUERY or IXLG return and reason codes.

---

**Explanation:** This message is a line of output from a DISPLAY GROUP command with the DETAIL option.

**System Action:** The DB2 subsystem displays the group, but some XCF or coupling facility structure information is missing. Refer to MVS/ESA Programming: Sysplex Services Reference for an explanation of IXCQUERY or IXLG return and reason codes.

---

**Explanation:** This message is a line of output from a DISPLAY GROUP command with the DETAIL option.

**System Action:** The DB2 subsystem displays the group, but some XCF or coupling facility structure information is missing. Refer to MVS/ESA Programming: Sysplex Services Reference for an explanation of IXCQUERY or IXLG return and reason codes.

---

**Explanation:** At least one data sharing parameter in the member's system parameters is not equal to the data sharing parameter value passed on the DB2 start-up procedure.

**System Action:** The DB2 subsystem terminates with reason code 00F70003.

**Operator Response:** Restart DB2 with the correct system parameters load module or inform the system programmer to change the DB2 start-up procedure.

**System Programmer Response:** Reassemble the system parameters load module. Make sure that the group name and the member name match the values in the DB2 start-up procedure, or correct the parameters on the DB2 start-up procedure.

---

**Explanation:** The started DB2 subsystem is already active on another MVS system.

**System Action:** The DB2 subsystem terminates with reason code 00F70003.

**Operator Response:** If you want the DB2 subsystem to run on this MVS system, stop the DB2 subsystem on the other MVS. After the DB2 subsystem stops, restart the DB2 on this MVS.

---

**Explanation:** The invalid member was found in a DB2 data sharing group, which is a particular type of cross-system coupling facility (XCF) group. The invalid name member-name was found in data sharing group db2-group-name and was deleted. member-name might represent an unauthorized program, other than DB2 for MVS/ESA, that attempted to join the data sharing group.

**System Action:** The DB2 subsystem continues.

**Operator Response:** Report the occurrence of this message to your system programmer.

**System Programmer Response:** Investigate which unauthorized program joined the DB2 group and find its owner. This could indicate a security violation.

---

**Explanation:** An unexpected error occurred when the data sharing DB2 member attempted to join the MVS cross-system coupling facility (XCF) data sharing group.

**System Action:** The DB2 subsystem terminates with reason code 00F70408.

**Operator Response:** Issue an MVS 'DISPLAY XCF,GROUP' command to ensure that XCF is functional; then try to restart the DB2 subsystem.

**System Programmer Response:** Refer to MVS/ESA Programming: Sysplex Services Reference for an explanation of the IXCJOIN return and reason codes.

---

**Explanation:** An unexpected error occurred during the execution of the MVS IXCQUERY macro.

**System Action:** The DB2 subsystem terminates with reason code 00F70406.

**Operator Response:** Issue an MVS 'DISPLAY XCF,GROUP' command to ensure that XCF is functional. Then try to restart the DB2 subsystem again.

**System Programmer Response:** Refer to MVS/ESA Programming: Sysplex Services Reference for an explanation of the IXCQUERY return and reason codes.
**DSN7407I** csect-name AUTOMATIC RESTART MANAGER function FAILED. MVS IXCARM RETURN CODE = xxxxxxxx, MVS IXCARM REASON CODE = yyyyyyyyy.

**Explanation:** DB2 encountered an error using the specified MVS automatic restart manager (ARM) function.

**System Action:** DB2 continues. However, if DB2 abnormally terminates, the MVS ARM cannot automatically restart DB2.

**System Programmer Response:** Refer to MVS/ESA Programming: Sysplex Services Reference for an explanation, return code, and reason code from the IXCARM request.

---

**DSN7408I** csect-name ARM EVENT EXIT FAILED. DB2 SUBSYSTEM sssnm NOT RESTARTED. MVS IEFSSI RETURN CODE = xxxxxxxx, MVS IEFSSI REASON CODE = yyyyyyyyy.

**Explanation:** The DB2 ARM event exit encountered an error while attempting to define the DB2 subsystem to MVS.

**System Action:** The automatic restart of the DB2 subsystem is stopped.

**System Programmer Response:** Refer to MVS/ESA Programming: Assembler Services Reference for return and reason codes from the IEFSSI request. If the IEFSSI return code and reason code are 0, look in the console log for previous messages that indicate why the definition of the DB2 subsystem failed. You can manually start DB2 by using the -START DB2 command on any system where the DB2 subsystem is defined.

---

**DSN7409I** csect-name MEMBER(member-name) UNABLE TO QUIESCE FROM DATA SHARING GROUP(group-name), MVS IXCQUIES RETURN CODE=xxxxxxxx, MVS IXCQUIES REASON CODE=yyyyyyyyy.

**Explanation:** An unexpected error occurred when the data sharing DB2 member attempted to place itself in an MVS cross-system coupling facility (XCF) quiesced state.

**System Action:** The DB2 subsystem termination continues.

**Operator Response:** Inform your system programmer.

**System Programmer Response:** Refer to MVS/ESA Programming: Sysplex Services Reference for an explanation of the IXCQUIES return and reason codes.

---

**DSN7501A** csect-name SCA STRUCTURE sca-structure-name CONNECTIVITY FAILURE.

**Explanation:** The specified DB2 member lost connectivity to the shared communication area (SCA) structure.

**System Action:** The specified DB2 disconnects from the SCA and terminates with reason code 00F70600.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Find out why the link from this central processor complex (CPC) to the SCA structure was lost. After fixing it, restart DB2.

---

**DSN7502I** csect-name SCA STRUCTURE sca-structure-name FAILURE, ATTEMPT TO REBUILD IS IN PROGRESS.

**Explanation:** The specified DB2 member detected the shared communications area (SCA) structure failure.

**System Action:** DB2 tries to rebuild the SCA structure on a coupling facility in the preference list for the coupling facility.

**Operator Response:** Wait for message DSN7503I or DSN7504A.

---

**DSN7503I** csect-name SCA STRUCTURE sca-structure-name REBUILD SUCCESSFUL.

**Explanation:** This member successfully connected to a shared communications area (SCA) structure on the same or an alternate coupling facility and completed restoration of its information in the shared communications area (SCA).

**System Action:** DB2 processing continues.

---

**DSN7504I** csect-name SCA STRUCTURE sca-structure-name REBUILD UNSUCCESSFUL. REASON CODE = xx.

**Explanation:** This member has not successfully connected to a shared communication area (SCA) structure on an alternate coupling facility and completed restoration of its information in the shared communications area (SCA). This message follows message DSN7502I.

04 An operator requested to stop the rebuild process.
08 A DB2 resource manager requested to stop the rebuild process.
12 The new SCA structure failed during the rebuild process.
16 A DB2 member lost connectivity to the new SCA in the rebuild process.
20 An MVS service used during the rebuild process failed. A message was issued from the failed MVS service.

**System Action:** This DB2 member terminates with reason code 00F70601. Other members can continue processing.

**System Programmer Response:** See the termination code for more details.

---

**DSN7505A** csect-name THERE IS A SHORTAGE OF FREE STORAGE IN SCA STRUCTURE sca-structure-name.

**Explanation:** The amount of free storage in the shared communications area (SCA) coupling facility structure is low. The SCA is 75 percent full. Because SCA storage space is required by some DB2 commands and processes, the availability of those processes might be affected. Completely running out of SCA storage can cause DB2 subsystem outages.

This message stays on the MVS console and is highlighted.

**System Action:** DB2 processing continues.

This message might remain highlighted and might not be automatically deleted in a pre SP5.2.1-JES3 environment.

**Operator Response:** If the message remains highlighted after the error situation is cleared up, manually delete the message from the console.
System Programmer Response: You can monitor the amount of SCA storage in use with the DISPLAY GROUP command.

You can free SCA storage by removing exception conditions. Another thing you can do is issue START DATABASE commands with the SPACENAM option or use the RECOVER utility to remove pages from the logical page list (LPL).

If you don’t do anything to reclaim space, message DSN7512A appears when the SCA is 90 percent full.

**DSN7506A**  csect-name CONNECT TO THE SCA STRUCTURE sc-structure-name FAILED. MVS IXLCONN RETURN CODE=xxxxxxx, MVS IXLCONN REASON CODE=yyyyyyyy.

**Explanation:** DB2 cannot connect to the shared communications area (SCA) coupling facility structure.

**System Action:** DB2 startup terminates with reason code 00F70602.

**System Programmer Response:** DB2 uses the MVS IXLCONN service to connect to the SCA structure. Refer to MVS/ESA Programming: Sysplex Services Reference for return and reason codes from the IXLCONN request.

**DSN7507I**  csect-name SCA STRUCTURE sc-structure-name IS ALLOCATED IN A VOLATILE STRUCTURE.

**Explanation:** The shared communications area (SCA) structure is volatile.

**System Action:** DB2 processing continues.

**System Programmer Response:** One DB2 issues this message whenever the structure has the volatile attribute. DB2 detects this either on the first connection to the SCA or on the attribute changes later. DB2 always requests a nonvolatile SCA. If this is not what you want, change the MVS CFRM administrative policy and request a rebuild of the SCA with the MVS SETXCF START,REBUILD command.

**DSN7508I**  csect-name ACCESS TO THE SCA STRUCTURE sc-structure-name FAILED. MVS IXLLIST RETURN CODE = xxxxxx, MVS IXLLIST REASON CODE = yyyyyyyyy.

**Explanation:** DB2 encountered an error in accessing the shared communications area (SCA) structure.

**System Action:** DB2 terminates with reason code 00F70603.

**System Programmer Response:** DB2 uses the MVS IXLLIST service to access the SCA structure. Refer to MVS/ESA Programming: Sysplex Services Reference for return and reason codes from the IXLLIST request.

**DSN7509I**  csect-name SCA STRUCTURE sc-structure-name IS ALLOCATED IN A NONVOLATILE STRUCTURE.

**Explanation:** The SCA structure is now contained in a nonvolatile coupling facility structure.

**System Action:** DB2 processing continues.

**DSN7510I**  csect-name SCA STRUCTURE sc-structure-name REBUILD REQUEST RECEIVED, BUT SUBSYSTEM IS NOT READY TO PARTICIPATE.

**Explanation:** The DB2 subsystem received a request from MVS to rebuild the shared communications area (SCA), but DB2 is not ready to participate in this process because DB2 startup has not yet completed.

**System Action:** DB2 terminates with reason code 00F70604. The SCA rebuild process might continue for other DB2s in the data sharing group.

**Operator Response:** Wait until the SCA rebuild process is finished and then start the failed DB2 again.

**DSN7511I**  csect-name RESPONSE TO MVS REBUILD COMPLETE OF SCA STRUCTURE sc-structure-name FAILED. MVS IXLREBLD RETURN CODE = xxxxxx, MVS IXLREBLD REASON CODE = yyyyyyyyy.

**Explanation:** DB2 encountered an error during the rebuild of the shared communications area (SCA) structure.

**System Action:** DB2 stops.

**System Programmer Response:** DB2 uses the MVS IXLREBLD service during the SCA structure rebuild. Refer to MVS/ESA Programming: Sysplex Services Reference for return and reason codes from the IXLREBLD request.

**DSN7512A**  csect-name THERE IS A CRITICAL SHORTAGE OF FREE STORAGE IN SCA STRUCTURE sc-structure-name.

**Explanation:** The amount of free storage in the shared communications area (SCA) coupling facility structure is critically low. The SCA is 90 percent full.

This message stays on the MVS console and is highlighted.

**System Action:** DB2 processing continues. However, DB2 limits use of SCA to critical information. Some utilities or commands that cannot be completed can cause one or more members of the group to come down.

This message might remain highlighted and might not be automatically deleted in a pre SP5.2.1-JES3 environment.

**Operator Response:** If the message remains highlighted after the error situation is cleared up, manually delete the message from the console.

**System Programmer Response:** You can monitor the amount of SCA storage in use with the DISPLAY GROUP command.

You can free SCA storage by removing exception conditions. Another thing you can do is issue START DATABASE commands with the SPACENAM option or use the RECOVER utility to remove pages from the logical page list (LPL). Then restart any failed DB2s.

If your actions do not free up enough space, or if the problem continues to occur, you have the following options, depending on what level of MVS and the coupling facility control code you are running with:

- If all members of the group are running with MVS Version 5 Release 2 and with a coupling facility control code level greater than 0, issue the SETXCF START,ALTER command to increase the size of the SCA. The size you
specify must be less than or equal to the maximum size defined the CFRM policy for the SCA structure.

If the maximum size (SIZE in the CFRM policy) is still not big enough, take the actions described below for MVS Version 5 Release 1 systems.

- If any or all members of the group are running with MVS Version 5 Release 1 or with a coupling facility control code level of 0, increase the storage for the SCA in the CFRM policy. Then issue the MVS SETXCF START,REBUILD command to rebuild the structure.

Refer to *DB2 Data Sharing: Planning and Administration* for more detailed recovery information.

---

**DSN7513I csect-name SCA STRUCTURE sca-structure-name HAS ADEQUATE FREE STORAGE**

**Explanation:** The shared communications area (SCA) coupling facility structure has adequate free storage to function properly.

This message is shown in the following circumstances:

- After the SCA was rebuilt.
- After the SCA usage goes below 67%, after its usage was up to 75% or higher.

**System Action:** DB2 processing continues.

---

**DSN7514I csect-name RESPONSE TO AN MVS REBUILD RELATED EVENT FOR THE SCA STRUCTURE sca-structure-name FAILED. MVS IXLEERSP RETURN CODE = xxxxxxxx, MVS IXLEERSP REASON CODE = yyyyyyy.**

**Explanation:** DB2 encountered an error during the rebuild of the shared communications area (SCA) structure.

**System Action:** DB2 terminates.

**System Programmer Response:** DB2 uses the MVS IXLEERSP service to respond to SCA structure rebuild. Refer to *MVS/ESA Programming: Sysplex Services Reference* for return and reason codes from the IXLEERSP request.
DSN8... Messages

**DSN8000I**  
**REQUEST IS:** `request`  
**Explanation:** The input statement is listed as received. This message is issued by the following CSECTs: DSN8BD3, DSN8BF3  
**System Action:** The request is listed.  
**User Response:** See if the input request is what you want.

**Explanation:** The input statement is listed as received. This message is issued by the following CSECTs: DSN8BD3, DSN8BF3  
**System Action:** The request is listed.  
**User Response:** See if the input request is what you want.

**DSN8001I**  
**csect EMPLOYEE NOT FOUND**  
**Explanation:** The ‘l’ or ‘list’ request found no employee data that match your request.  
**System Action:** No employees are listed.  
**User Response:** If no employee data was expected to be found, continue.  
**Problem Determination:** If the error is unexpected, list the contents of the employee and department views VEMP and VDEPT to determine why the entry is missing.

**DSN8002I**  
**csect EMPLOYEE SUCCESSFULLY ADDED**  
**Explanation:** Employee data was added as requested.  
**System Action:** The request was executed successfully.

**DSN8003I**  
**csect EMPLOYEE SUCCESSFULLY ERASED**  
**Explanation:** Data for an employee was erased as requested.  
**System Action:** The request was executed successfully.

**DSN8004I**  
**csect EMPLOYEE SUCCESSFULLY UPDATED**  
**Explanation:** Data for an employee was updated as requested.  
**System Action:** The request was executed successfully.

**DSN8005E**  
**csect EMPLOYEE EXISTS ALREADY, ADD NOT DONE**  
**Explanation:** A request was made to add data for a new employee, but the employee number already exists.  
**System Action:** No employee data is added.  
**User Response:** Display the existing employee data. If this is the desired employee, update the employee entry. Otherwise, choose a new employee number.  
**Problem Determination:** List the contents of the employee view, VEMP, and the department view, VDEPT.

**DSN8006E**  
**csect EMPLOYEE DOES NOT EXIST, ERASE NOT DONE**  
**Explanation:** The erase requested was not performed. The employee number requested was not present in the table.  
**System Action:** No employee data is erased.  
**User Response:** Determine if the employee data to be erased should exist. Verify that the correct search criteria and data were entered. If appropriate, correct the entries and continue processing.

**DSN8007E**  
**csect EMPLOYEE DOES NOT EXIST, UPDATE NOT DONE**  
**Explanation:** The update requested was not performed. The employee number requested was not present in the table.  
**System Action:** No employee data is updated.  
**User Response:** Verify that the correct search criteria and data were entered.  
**Problem Determination:** List the contents of the employee table (VPHONE, VEMPLP, or EMP) and see if the employee number to be updated is in the table. Correct the update request or the table.

**DSN8008I**  
**csect NO EMPLOYEE FOUND IN TABLE**  
**Explanation:** No employees match the selection criteria.  
**System Action:** No employee data is listed.  
**User Response:** If no employee data was expected to be found, continue.  
**Problem Determination:** List the contents of the VPHONE view and the underlying tables.

**DSN8011I**  
**csect DEPARTMENT NOT FOUND**  
**Explanation:** No departments match the selection criteria.  
**System Action:** No departments are listed.  
**User Response:** If no departments are expected to be found, continue.  
**Problem Determination:** If the error is unexpected, list the contents of the department views VDEPT and VDEPMG1 and their underlying tables to determine why the entry is missing.

**DSN8012I**  
**csect DEPARTMENT SUCCESSFULLY ADDED**  
**Explanation:** A department was added as requested.  
**System Action:** The request was executed successfully.

**DSN8013I**  
**csect DEPARTMENT SUCCESSFULLY ERASED**  
**Explanation:** Data for a department was erased as requested.  
**System Action:** The request was executed successfully.

**DSN8014I**  
**csect DEPARTMENT SUCCESSFULLY UPDATED**  
**Explanation:** Data for a department was updated as requested.  
**System Action:** The request was executed successfully.

© Copyright IBM Corp. 1982, 1999
DSN8015E  csect  DEPARTMENT EXISTS ALREADY, ADD NOT DONE
Explanation: You requested that a new department be added, but the department exists already.
System Action: No departments are added.
User Response: Display data for the existing department. If it is what you want, continue. If not, you can update data for this department or choose a new department id.
Problem Determination: If the error is unexpected, list the contents of the department views VDEPT and VDEPMG1 and their underlying tables to see if the data differs from what is expected.

DSN8016E  csect  DEPARTMENT DOES NOT EXIST, ERASE NOT DONE
Explanation: The erase request found no departments which match your request.
System Action: No department data is erased.
User Response: See if the department data to be erased should exist. Did you enter the correct combination of search criteria and data? If not, correct the entries and continue.
Problem Determination: If the error is unexpected, list the contents of the department views VDEPT and VDEPMG1 and their underlying tables to determine why the entry is missing.

DSN8017E  csect  DEPARTMENT DOES NOT EXIST, UPDATE NOT DONE
Explanation: The update request found no department data which matches your request.
System Action: No department data is updated.
User Response: See if the department data to be updated should exist. If you did not enter the correct combination of search criteria and data, correct the entries and continue.
Problem Determination: If the error is unexpected, list the contents of the department views VDEPT and VDEPMG1 and their underlying tables to determine why the entry is missing.

DSN8018I  csect  CURRENT DEPARTMENT NOT FOUND
Explanation: A request was made by a ‘current’ department to reference a ‘higher’ department. The ‘current’ department was not found.
System Action: No department data is processed.
User Response: If the ‘current’ department was not expected to exist, continue processing.
Problem Determination: List the contents of the department views VDEPMG1, VEMP, VASTRDE1, and VASTRDE2 and their underlying tables.

DSN8019E  csect  NO HIGHER DEPARTMENT EXISTS
Explanation: A request was made by a ‘current’ department to reference a ‘higher’ level of the department structure. A ‘higher’ level does not exist for the requested ‘current’ department.
System Action: No department data is processed.
User Response: If a ‘higher’ department was not expected to be found, continue processing.

Problem Determination: List the contents of the department views VDEPMG1, VEMP, VASTRDE1, and VASTRDE2 and their underlying tables.

DSN8021I  csect  ACTIVITY NOT FOUND
Explanation: No activities match the selection criteria.
System Action: No activity is listed.
User Response: If no activity was expected to be found, continue processing.
Problem Determination: List the contents of the activity views VPROJRE1, VACT, and VPROJACT and their underlying tables.

DSN8022I  csect  ACTIVITY SUCCESSFULLY ADDED
Explanation: An activity was added as requested.
System Action: The request was executed successfully.

DSN8023I  csect  ACTIVITY SUCCESSFULLY ERASED
Explanation: An activity was erased as requested.
System Action: The request was executed successfully.

DSN8024I  csect  ACTIVITY SUCCESSFULLY UPDATED
Explanation: An activity was updated as requested.
System Action: The request was executed successfully.

DSN8025E  csect  ACTIVITY EXISTS ALREADY, ADD NOT DONE
Explanation: The addition requested was not performed. The activity requested was already present.
System Action: No activity is added.
User Response: If the activity was expected to already exist, continue processing.
Problem Determination: List the contents of the activity views VPROJRE1, VACT, and VPROJACT and their underlying tables.

DSN8026E  csect  ACTIVITY DOES NOT EXIST, ERASE NOT DONE
Explanation: The erase requested was not performed. The activity requested was not found.
System Action: No activity is erased.
User Response: If the activity was not expected to be found, continue processing.
Problem Determination: List the contents of the activity views VPROJRE1, VACT, and VPROJACT and their underlying tables.
** Problem Determination:** If the error was unexpected, list the contents of the project view VPROJ and its underlying tables to determine why the entry is missing.

**DSN8036E**  
**csect** PROJECT DOES NOT EXIST, ERASE NOT DONE

**Explanation:** The erase request found no project which matches your request.

**System Action:** No projects are erased.

**User Response:** See if the project to be erased should exist. Did you enter the correct combination of search criteria and data? If not, correct the entries and continue.

**Problem Determination:** If the error was unexpected, list the contents of the project view VPROJ and its underlying tables to determine why the entry is missing.

**DSN8037E**  
**csect** PROJECT DOES NOT EXIST, UPDATE NOT DONE

**Explanation:** The update request found no project which matches your request.

**System Action:** No projects are updated.

**User Response:** See if the project to be updated should exist. If you did not enter the correct combination of search criteria and data, correct the entries and continue.

**Problem Determination:** If the error was unexpected, list the contents of the project view VPROJ and its underlying tables to determine why the entry is missing.

**DSN8038I**  
**csect** CURRENT PROJECT NOT FOUND

**Explanation:** A request was made by a 'current' project to reference a 'higher' project. The 'current' project was not found.

**System Action:** No project data is processed.

**User Response:** If a 'higher' project was not expected to be found, continue processing.

**Problem Determination:** List the contents of the project views VPROJRE1, VDEPT, VEMPPROJACT, VEMP, VSTAFAC1, VSTAFAC2, VPSTRDE1, and VPSTRDE2 and their underlying tables.

**DSN8039E**  
**csect** NO HIGHER PROJECT EXISTS

**Explanation:** A request was made by a 'current' project to reference a 'higher' level of the project structure. A 'higher' level does not exist for the requested 'current' project.

**System Action:** No project data is processed.

**User Response:** If a 'higher' project was not expected to be found, continue processing.

**Problem Determination:** List the contents of the project views VPROJRE1, VDEPT, VEMPPROJACT, VEMP, VSTAFAC1, VSTAFAC2, VPSTRDE1, and VPSTRDE2 and their underlying tables.
DSN8041I  csect STAFFING NOT FOUND
Explanation: No project staffing matches the selection criteria.
System Action: No project staffing is listed.
User Response: If no project staffing was expected to be found, continue processing.
Problem Determination: List the contents of the project activity views VPROJRE1, VEMPPROJACT, VACT, and VEMP and their underlying tables.

DSN8042I  csect STAFFING SUCCESSFULLY ADDED
Explanation: A project staffing was added as requested.
System Action: The request was executed successfully.

DSN8043I  csect STAFFING SUCCESSFULLY ERASED
Explanation: A project staffing was erased as requested.
System Action: The request was executed successfully.

DSN8044I  csect STAFFING SUCCESSFULLY UPDATED
Explanation: A project staffing was updated as requested.
System Action: The request was executed successfully.

DSN8045E  csect STAFFING EXISTS ALREADY, ADD NOT DONE
Explanation: A request was made to add a project staffing, but the project staffing already exists.
System Action: No project staffing is added.
User Response: Display the existing project staffing. If this is the desired project staffing, update it. Otherwise, choose a new project staffing.
Problem Determination: List the contents of the project activity views VPROJRE1, VEMPPROJACT, VACT, and VEMP and their underlying tables.

DSN8046E  csect STAFFING DOES NOT EXIST, ERASE NOT DONE
Explanation: The project staffing was not erased as requested.
System Action: No project staffing is erased.
User Response: Determine if the project staffing to be erased should exist. Verify that the correct search criteria and data were entered. If appropriate, correct the entries and continue processing.
Problem Determination: List the contents of the project activity views VPROJRE1, VEMPPROJACT, VACT, and VEMP and their underlying tables.

DSN8047E  csect STAFFING DOES NOT EXIST, UPDATE NOT DONE
Explanation: The update was not performed because the project staffing requested was not found.
System Action: No project staffing is updated.
User Response: Determine if the project staffing to be updated should exist. Verify that the correct search criteria and data were entered. If appropriate, correct the entries and continue processing.
Problem Determination: List the contents of the project activity views VPROJRE1, VEMPPROJACT, VACT, and VEMP and their underlying tables.

DSN8051I  csect PROGRAM ENDED
Explanation: The application program finished.

DSN8053I  csect ROLLBACK SUCCESSFUL, ALL UPDATES REMOVED
Explanation: After any SQLWARNING or SQLERROR, all updates are removed via a ROLLBACK statement to prevent invalid updates.
System Action: The ROLLBACK was executed successfully.
User Response: Correct the prior error.

DSN8056I  csect NO MORE DATA TO DISPLAY
Explanation: The last page of data has been displayed.
System Action: No more data is shown on screen.
User Response: If you expect no more data to be displayed, continue.
Problem Determination: If more displayed data is expected, list the contents of the view and the underlying tables to see if the data differs from what is expected.

DSN8057I  csect FURTHER ENTRIES IN TABLE - UPDATE POSSIBLE
Explanation: More data exists beyond that shown on the screen.
System Action: No more data is shown on screen.
User Response: Update entries as needed.

DSN8058I  csect PRESS PA1 FOR NEXT PAGE / ENTER FOR SELECTION MENU
Explanation: Press the PA1 key to see the data on the next page or press the ENTER key to return to the selection menu.
User Response: Press the PA1 key or the ENTER key depending on the function you want to perform.

DSN8060E  csect SQL ERROR, RETURN CODE IS: sqlcode
Explanation: The SQL statement did not execute correctly. The "sqlcode" can be found elsewhere in this manual. This may be an SQL error or an SQL warning.
System Action: The request was not executed successfully.
User Response: Refer to "Section 2, SQL Return Codes" on page 17 for more information about the error.
Problem Determination: Determine which SQL statement in
the application program caused the error and see if it is repro-
ducible. Follow the diagnosis approach suggested for the
sqlcode.

---

**DSN8061E csect ROLLBACK FAILED, RETURN CODE IS:**

*sqlcode*

**Explanation:** The SQL ROLLBACK statement was not exe-
cuted correctly.

**System Action:** The request was not executed successfully.

**User Response:** Refer to "Section 2. SQL Return Codes" on
text page 17.

**Problem Determination:** Determine which SQL statement in
the application program caused the error and see if it is repro-
ducible. Follow the diagnosis approach suggested for the
sqlcode.

---

**DSN8062E csect AN OBJECT WAS NOT SELECTED**

**Explanation:** You did not specify an object code on the input
line.

**User Response:** Select one of the object codes listed on the
panel.

---

**DSN8064E csect INVALID DL/I STC-CODE ON GU MSG:**

*status-code*

**Explanation:** In attempting to get a message from IMS, an
unexpected status-code was received.

**System Action:** The application program is terminated.

**Problem Determination:** Refer to the messages and codes
manual for IMS/VS to determine the reason for the unexpected
status code.

---

**DSN8065E csect INVALID DL/I STC-CODE ON ISRT MSG:**

*status-code*

**Explanation:** In attempting to insert a message for IMS, an
unexpected status-code was received.

**System Action:** The application program is terminated.

**Problem Determination:** Refer to the messages and codes
manual for IMS/VS to determine the reason for the unexpected
status code.

---

**DSN8066E csect UNSUPPORTED PFK OR LOGIC ERROR**

**Explanation:** The sample application found an unsupported
program function key or logic error while trying to execute a
request.

**System Action:** The request was not executed successfully.

**User Response:** Report the error in the application program.

---

**DSN8067E csect UNSUPPORTED SEARCH CRITERIA FOR
OBJECT**

**Explanation:** You entered a search criteria value and an
object value that do not find any selections.

**System Action:** The request was not executed successfully.

**User Response:** Enter new search criteria values.

**Problem Determination:** If the values you entered are
expected to provide valid selections, check the contents of the
view and the underlying tables to see if the data differs from
what is expected. If after checking the view and the underlying
tables, you find the search criteria values you entered should
provide valid selections, the error is in the sample program.
Report the error.

---

**DSN8068E csect INVALID REQUEST SHOULD BE 'L' OR
'U'**

**Explanation:** The input must begin with 'L' or 'U'.

**System Action:** The request is ignored.

**User Response:** Correct the input request.

---

**DSN8069E csect NO VALID SELECTIONS QUALIFY FOR
THIS REQUEST**

**Explanation:** You entered a search criteria value and a data
values that do not find any selections.

**System Action:** The request was not executed successfully.

**User Response:** Enter new search criteria values.

**Problem Determination:** If the criteria values you entered
are expected to provide valid selections, check the contents of
the view and the underlying tables to see if the data differs
from what is expected. If after checking the view and the
underlying tables, you find the search criteria values you
entered should provide valid selections, the error is in the
sample program. Report the error.

---

**DSN8070E csect VITAL DATA IS MISSING IN TABLE
TOPTVAL**

**Explanation:** No valid entries exist in the table that contains
possible valid entries.

**System Action:** The request was not executed successfully.

**User Response:** There is no valid entry you can enter.
Report the error in the sample program.

---

**DSN8072E csect INVALID SELECTION ON SECONDARY
SCREEN**

**Explanation:** You gave an invalid line number.

**System Action:** The request was not executed successfully.

**User Response:** You entered a number that is not in the list
on the left under the heading NO for line number. Enter a valid
number.

**Problem Determination:** If the line number you entered is in
the list on the left under the heading NO for line number, then
the error is in the sample program.

---

**DSN8073E csect SPECIFIED LINE-NUMBER NOT FOUND
IN PREVIOUS SCREEN**

**Explanation:** You gave an invalid line number.

**System Action:** The request was not executed successfully.

**User Response:** You entered a number that is not in the list
on the left under the heading NO for line number. Enter a valid
number. If the line number is in the previous screen, then this
is an error in the sample program. Report the error.

---

**DB2 Messages**
**Explanation:** You entered a data value that has too many characters for the type of search criterion you selected. For example, department ids have a maximum of 3 characters and most other ids have a maximum of 6 characters.

**System Action:** The request was not executed successfully.

**User Response:** Enter a data value with the correct number of characters.

---

**Explanation:** There is an error in the parameters passed to the SQLCA formatting routine, DSNTIAR.

**System Action:** The SQLCA could not be formatted properly.

**User Response:** This is an error in the program. Check the return code listing of DSNTIAR in Section 3 of DB2 Application Programming and SQL Guide. Report the error.

---

**Explanation:** No valid entries exist in the table that contains possible valid entries.

**System Action:** The request was not executed successfully.

**User Response:** There is no valid entry you can enter. Report the error in the application program.

---

**Explanation:** Sample programs DSN8SC3, DSN8SP3, and DSN8HC3 cannot be called directly from TSO. Instead, they must be called from the ISPF sample connection manager, DSN8SCM or DSN8SPM.

**System Action:** The program ends.

**User Response:** Call the desired program through the connection manager, DSN8SCM or DSN8SPM.

---

**Explanation:** The call attachment facility service requested by the application program did not execute successfully.

**System Action:** The requested service was not executed.

**User Response:** Notify the system programmer.

**System Programmer Response:** The service request must be a valid call attachment facility service. Ensure that the request is one of the services supported by the call attachment facility.

**Problem Determination:** Follow the failure analysis procedures for the call attachment facility reason code.

---

**Explanation:** The user is requesting an invalid service. This message is issued by the following CSECTs: DSN8SCM, DSN8SPM

**System Action:** The requested service was not executed.

**User Response:** Notify the system programmer.

**System Programmer Response:** The service request must be a valid call attachment facility service. Ensure that the request is one of the services supported by the call attachment facility.

**Problem Determination:** There is an error in the Sample Application Program.

---

**Explanation:** The employee number that is to be added refers to a department number that is not contained in the table DEPT.

**System Action:** The employee number is not added.

**User Response:** Ensure that the correct department number was entered.

**Problem Determination:** List the contents of the department table DEPT.
**Explanation:** The employee number to be erased is the same as a responsible employee number in the table PROJ or an employee number in the table EMPPROJACT. The employee number cannot be erased from the table EMP.

**System Action:** No employee data is erased.

**User Response:** Ensure that the correct employee number was entered.

**Problem Determination:** List the contents of the PROJ and EMPPROJACT tables.

---

**Explanation:** The employee that is to be updated has a department number that is not contained in the table DEPT. The update cannot be completed.

**System Action:** No employee data is updated.

**User Response:** Ensure that the correct department number was entered.

**Problem Determination:** List the contents of the employee table DEPT.

---

**Explanation:** The department that is to be updated has a manager number that is not contained in the table EMP. The update cannot be completed.

**System Action:** No department data is updated.

**User Response:** Ensure that the correct manager number was entered.

**Problem Determination:** List the contents of the employee table EMP.

---

**Explanation:** The department that is to be added has a department number that is not contained in the table DEPT. The add cannot be completed.

**System Action:** No department is added.

**User Response:** Ensure that the correct department number was entered.

**Problem Determination:** List the contents of the employee table EMP.

---

**Explanation:** The department that is to be added has a manager number that is not contained in the table EMP. The add cannot be completed.

**System Action:** No department is added.

**User Response:** Ensure that the correct department number was entered.

**Problem Determination:** List the contents of the department table DEPT.

---

**Explanation:** The department that is to be added has a department number that is not contained in the table DEPT. The add cannot be completed.

**System Action:** No department data is updated.

**User Response:** Ensure that the correct department number was entered.

**Problem Determination:** List the contents of the department table DEPT.

---

**Explanation:** The activity that is to be added contains a project number that is not contained in the table PROJ. The add cannot be completed.

**System Action:** The activity is not added.

**User Response:** Ensure that the correct project number was entered.

**Problem Determination:** List the contents of the project table PROJ.
<table>
<thead>
<tr>
<th>Message Code</th>
<th>Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>DSN8222E</td>
<td><em>csect ACTIVITY HAS DEPENDENT ROWS, NOT ERASED</em></td>
</tr>
<tr>
<td><strong>Explanation:</strong></td>
<td>The activity that is to be erased from table PROJACT is the same as the corresponding activity in the table EMPPROJACT. The activity cannot be erased from the table PROJACT.</td>
</tr>
<tr>
<td><strong>System Action:</strong></td>
<td>No activity data is erased.</td>
</tr>
<tr>
<td><strong>User Response:</strong></td>
<td>Ensure that the correct activity was entered.</td>
</tr>
<tr>
<td><strong>Problem Determination:</strong></td>
<td>List the contents of the PROJACT and EMPPROJACT tables.</td>
</tr>
<tr>
<td>DSN8223E</td>
<td><em>csect ACTIVITY HAS DEPENDENT ROWS, NOT UPDATED</em></td>
</tr>
<tr>
<td><strong>Explanation:</strong></td>
<td>A start date in table PROJACT is to be updated, but there is a project staffing for this activity in table EMPPROJACT. The start date in table PROJACT cannot be updated.</td>
</tr>
<tr>
<td><strong>System Action:</strong></td>
<td>No activity data is updated.</td>
</tr>
<tr>
<td><strong>User Response:</strong></td>
<td>Ensure that the correct start date was entered.</td>
</tr>
<tr>
<td><strong>Problem Determination:</strong></td>
<td>List the contents of the project-activity-staffing table EMPPROJACT and project-activity table PROJACT.</td>
</tr>
<tr>
<td>DSN8230E</td>
<td><em>csect INVALID DEPARTMENT NUMBER, PROJECT NOT ADDED</em></td>
</tr>
<tr>
<td><strong>Explanation:</strong></td>
<td>The project that is to be added contains a department number that is not present in the table DEPT. The add cannot be completed.</td>
</tr>
<tr>
<td><strong>System Action:</strong></td>
<td>No project is added.</td>
</tr>
<tr>
<td><strong>User Response:</strong></td>
<td>Ensure that the correct department number was entered.</td>
</tr>
<tr>
<td><strong>Problem Determination:</strong></td>
<td>List the contents of the department table DEPT.</td>
</tr>
<tr>
<td>DSN8231E</td>
<td><em>csect INVALID RESPONSIBLE ID, PROJECT NOT ADDED</em></td>
</tr>
<tr>
<td><strong>Explanation:</strong></td>
<td>The project that is to be added contains an employee number that is not contained in the table EMP. The add cannot be completed.</td>
</tr>
<tr>
<td><strong>System Action:</strong></td>
<td>No project is added.</td>
</tr>
<tr>
<td><strong>User Response:</strong></td>
<td>Ensure that the correct employee number was entered.</td>
</tr>
<tr>
<td><strong>Problem Determination:</strong></td>
<td>List the contents of the employee table EMP.</td>
</tr>
<tr>
<td>DSN8233E</td>
<td><em>csect INVALID MAJOR PROJECT ID, PROJECT NOT ADDED</em></td>
</tr>
<tr>
<td><strong>Explanation:</strong></td>
<td>The project that is to be added has a major project ID that is not contained in the table PROJ. The add cannot be completed.</td>
</tr>
<tr>
<td><strong>System Action:</strong></td>
<td>No project is added.</td>
</tr>
<tr>
<td><strong>User Response:</strong></td>
<td>Ensure that the correct major project number was entered.</td>
</tr>
<tr>
<td><strong>Problem Determination:</strong></td>
<td>List the contents of the project table PROJ.</td>
</tr>
<tr>
<td>DSN8236E</td>
<td><em>csect INVALID ASSOCIATE DEPT ID, PROJECT NOT UPDATED</em></td>
</tr>
<tr>
<td><strong>Explanation:</strong></td>
<td>The project that is to be updated has a department number that is not contained in the table DEPT. The update cannot be completed.</td>
</tr>
<tr>
<td><strong>System Action:</strong></td>
<td>No project data is updated.</td>
</tr>
<tr>
<td><strong>User Response:</strong></td>
<td>Ensure that the correct department number was entered.</td>
</tr>
<tr>
<td><strong>Problem Determination:</strong></td>
<td>List the contents of the department table DEPT.</td>
</tr>
<tr>
<td>DSN8237E</td>
<td><em>csect INVALID RESPONSIBLE ID, PROJECT NOT UPDATED</em></td>
</tr>
<tr>
<td><strong>Explanation:</strong></td>
<td>The project that is to be updated has an employee number that is not contained in the table EMP. The update cannot be completed.</td>
</tr>
<tr>
<td><strong>System Action:</strong></td>
<td>No project data is updated.</td>
</tr>
<tr>
<td><strong>User Response:</strong></td>
<td>Ensure that the correct employee number was entered.</td>
</tr>
<tr>
<td><strong>Problem Determination:</strong></td>
<td>List the contents of the employee table EMP.</td>
</tr>
<tr>
<td>DSN8238E</td>
<td><em>csect INVALID MAJOR PROJECT ID, PROJECT NOT UPDATED</em></td>
</tr>
<tr>
<td><strong>Explanation:</strong></td>
<td>The project that is to be updated has a major project number that is not contained in the table PROJ. The update cannot be completed.</td>
</tr>
<tr>
<td><strong>System Action:</strong></td>
<td>No project data is updated.</td>
</tr>
<tr>
<td><strong>User Response:</strong></td>
<td>Ensure that the correct project number was entered.</td>
</tr>
<tr>
<td><strong>Problem Determination:</strong></td>
<td>List the contents of the project table PROJ.</td>
</tr>
<tr>
<td>DSN8240E</td>
<td><em>csect INVALID EMPLOYEE NUMBER, STAFFING NOT ADDED</em></td>
</tr>
<tr>
<td><strong>Explanation:</strong></td>
<td>The staffing that is to be added refers to an employee number that is not present in table EMP. The add cannot be completed.</td>
</tr>
<tr>
<td><strong>System Action:</strong></td>
<td>No staffing is added.</td>
</tr>
<tr>
<td><strong>User Response:</strong></td>
<td>Ensure that the correct employee number was entered.</td>
</tr>
<tr>
<td><strong>Problem Determination:</strong></td>
<td>List the contents of employee table EMP.</td>
</tr>
</tbody>
</table>
**DSN8242E  csect INVALID PROJECT ACTIVITY DATA, STAFFING NOT ADDED**

**Explanation:** The staffing that is to be added refers to a project number, activity number, and start date that is not present in table PROJACT. The add cannot be completed.

**System Action:** No staffing is added.

**User Response:** Ensure that the correct project number, activity number, and start date were entered.

**Problem Determination:** List the contents of the project table PROJACT.

---

**DSN8243E  csect INVALID START DATE, STAFFING NOT UPDATED**

**Explanation:** The start date given is not currently in the project-activity table PROJACT. The update cannot be completed.

**System Action:** No staffing data is updated.

**User Response:** Ensure that the correct start date was entered.

**Problem Determination:** List the contents of the project-activity table PROJACT and the project-activity-staffing table EMPPROJACT.
## DSN9... Messages

### DSN9000I  KEYWORD keyword-name APPEARS MORE THAN ONCE

**Explanation:** The same keyword (specified in the messages as 'keyword-name') appears more than once in the command. This message will be issued for each occurrence of the keyword after the first.

**System Action:** Processing for the command is terminated.

**System Programmer Response:** Correct the command by using the keyword only once, and reenter the command.

**Problem Determination:** Obtain a copy of the system or terminal log to verify the command entry.

### DSN9001I  KEYWORD keyword-name IS INVALID

**Explanation:** The keyword (specified in the message as 'keyword-name') is unknown or undefined. The keyword may be misspelled, or the keyword may not be applicable to the command being processed.

**System Action:** Processing for the command is terminated.

**System Programmer Response:** Correct the keyword, and reissue the command.

**Problem Determination:** Obtain a copy of the system or terminal log to verify the command entry.

### DSN9002I  UNBALANCED PARENTHESES WERE FOUND FOLLOWING KEYWORD keyword-name

**Explanation:** An invalid combination of parentheses has been encountered following the keyword (specified in the message as 'keyword-name'). Parentheses must be paired open and close, and a close parenthesis must follow an open parenthesis before another open parenthesis is encountered.

**System Action:** Processing for the command is terminated.

**System Programmer Response:** Correct the error, and reissue the command.

**Problem Determination:** Obtain a copy of the system or terminal log to verify the command entry.

### DSN9003I  KEYWORD keyword-name PARAMETER CONTAINS UNBALANCED APOSTROPHES

**Explanation:** An odd number of apostrophes is present in a parameter. If the parameter is a quoted string, it must have one apostrophe at each end of the string. If an apostrophe is to appear within the string, two adjacent apostrophes must be entered. If the parameter is a hexadecimal value, it must be entered as X'hex characters'.

**System Action:** Processing for the command is terminated.

**System Programmer Response:** Correct the error, and reissue the command.

**Problem Determination:** Obtain a copy of the system or terminal log to verify the command entry.

### DSN9004I  KEYWORD keyword-name RANGE (c) INCORRECTLY SPECIFIED

**Explanation:** The range for a keyword (specified in the message as 'keyword-name') was incorrectly specified using the syntax character specified in the message as 'c'. The standard syntax character used to denote a range is a colon (:). Either the ending limit of the range was omitted or a subset was specified within the range.

**Examples of this error are** LINE(1:) and GROUP(A*B*).

**Examples of a correctly specified range are** LINE(1:3) and GROUP(A:B).

**System Action:** Processing for the command is terminated.

**System Programmer Response:** Refer to DB2 Command Reference to verify that the command you are using allows a range for the given keyword. Correct the error, and reissue the command.

**Problem Determination:** Obtain a copy of the system or terminal log to verify the command entry.

### DSN9005I  KEYWORD keyword-name SUBSET (c) INCORRECTLY SPECIFIED

**Explanation:** The subset for a keyword (specified in the message as 'keyword-name') was incorrectly specified for use with the syntax character 'c' in the message. The standard syntax character used to denote a subset is an asterisk (*).

For example, consider a group of objects named BLACK, BLUE, GREEN, RED, and WHITE. You may either explicitly specify BLACK and BLUE, or you may specify BL*, meaning all members of the group whose names begin with BL. The character that follows the asterisk must be a blank, comma, close parenthesis, or colon.

**Examples of such an error are** NAME(BL*CK) and NAME('LUE).

**Examples of correct specification are** NAME(BL*) and UNIT(2*).

**System Action:** Processing for the command is terminated.

**System Programmer Response:** Refer to DB2 Command Reference to be sure that the command you are using allows a subset for the named keyword. Correct the error, and reissue the command.

**Problem Determination:** Obtain a copy of the system or terminal log to verify command entry.

### DSN9006I  KEYWORD keyword-name ASTERISK (c) INCORRECTLY USED

**Explanation:** For the keyword specified in the message (as 'keyword-name'), an asterisk (c) was used as the first character of a parameter to specify ALL. However, the asterisk appears in a list, or the characters in juxtaposition are not a blank, comma, equal sign, or parentheses.

**Examples of such errors are** LINE(LINE1,*,LINE7), NAME(**), and GROUP(PQR,*).

**Examples of correct specification are** UNIT(1) and LINE=* etc.

**System Action:** Processing for the command is terminated.
System Programmer Response: Refer to DB2 Command Reference to be sure the command you are using allows specification of ALL for the given keyword. Correct the error, and reissue the command.

Problem Determination: Obtain a copy of the system or terminal log to verify command entry.

DSN9007I  THIS COMMAND REQUIRES ONE OF THE FOLLOWING KEYWORDS TO BE SPECIFIED,
          keyword1 keyword2 keyword3 keyword4 keyword5 keyword6 keyword7 keyword8

Explanation: One of the keywords identified in the list must be specified on this command, but none of these keywords was present.

System Action:  Processing for the command is terminated.

System Programmer Response: Identify the appropriate keyword from the list, include that keyword, and reissue the command. Refer to DB2 Command Reference for descriptions of the keywords.

Problem Determination: Obtain a copy of the system or terminal log to verify command entry.

DSN9008I  KEYWORD keyword-name MAY NOT BE NEGATED

Explanation: The negation characters (NO) appear in front of the keyword (specified in the message as ‘keyword-name’), but negating this keyword is not allowed. As an example, consider a keyword called PRINT that could indicate that you want something printed. If you did not want the material to be printed, you might specify NOPRINT. This process of prefixing a keyword with the characters NO is called negation. While negation may be meaningful on some keywords, it is not allowed on all keywords.

System Action:  Processing for the command is terminated.

System Programmer Response: Reenter the command, but do not negate the named keyword. Refer to DB2 Command Reference for further information concerning this command.

Problem Determination: Obtain a copy of the system or terminal log to verify the command entry.

DSN9009I  KEYWORD keyword-name IS MISSING AND MUST BE SPECIFIED

Explanation: The keyword specified in the message (as ‘keyword-name’) must be present, but it was not entered. This keyword must be present in order for the command to process properly.

System Action:  Processing for the command is terminated.

System Programmer Response: Enter the command again, and include the specified keyword.

Problem Determination: Obtain a copy of the system or terminal log to verify the command entry.

DSN9010I REQUIRED PARAMETER FOR KEYWORD keyword-name

Explanation: A parameter must be specified for the keyword specified in the message (as ‘keyword-name’), but no parameter was entered.

As an example of this error, consider a keyword called PRIORITY whose value can range from 0 to 9. Specification of PRIORITY(1) is acceptable, but, if you specify PRIORITY with no parameter value, the keyword is meaningless.

System Action:  Processing for the command is terminated.

System Programmer Response: Supply appropriate parameters for the specified keyword and reissue the command. Refer to DB2 Command Reference for valid parameter values.

Problem Determination: Obtain a copy of the system or terminal log to verify the command entry.

DSN9011I PARAMETER(S) CANNOT BE SPECIFIED FOR KEYWORD keyword-name

Explanation: No parameter(s) can be specified for the keyword specified in the message (as ‘keyword-name’). You may have misspelled the keyword-name, causing it to be interpreted as a different keyword, or the parameter may actually belong with another keyword instead of the one on which you entered it.

System Action:  Processing for the command is terminated.

System Programmer Response: Correct the error, and reissue the command. Refer to DB2 Command Reference for details on how to enter the command.

Problem Determination: Obtain a copy of the system or terminal log to verify the command entry.

DSN9012I KEYWORD keyword-name PARAMETER(S) MUST BE HEXADECIMAL

Explanation: Parameter values for the keyword specified in the message (as ‘keyword-name’) must be hexadecimal values. The value must be specified as X ‘hex characters’. Hexadecimal characters are defined as the numeric digits 0 through 9 and the letters A through F. Either uppercase or lowercase is acceptable for the letters A through F.

As an example of this error, consider the keyword OFFSET, for which you are expected to enter a hexadecimal value. If you enter OFFSET(X ‘2C’), it is acceptable. However, entering OFFSET(Jones) is not acceptable.

System Action:  Processing for the command is terminated.

System Programmer Response: Reissue the command, but ensure that the parameters for the named keyword are hexadecimal values.

Problem Determination: Obtain a copy of the system or terminal log to verify the command entry.

DSN9013I KEYWORD keyword-name PARAMETER parameter_value EXCEEDS ALLOWABLE LENGTH OF nn

Explanation: The parameter value (specified in the message as ‘parameter_value’) exceeds the limit of ‘nn’ characters in length.

As an example of this type of error, consider a PRIORITY keyword whose value may range from zero to nine. If you
specify PRIORITY(21) or PRIORITY(006), the value you have entered exceeds the limit of one character.

System Action: Processing for the command is terminated.

System Programmer Response: Refer to DB2 Command Reference for a list of acceptable parameters. Correct the error, and reissue the command.

Problem Determination: Obtain a copy of the system or terminal log to verify the command entry.

**DSN9014I** KEYWORD keyword-name LIMIT OF nn PARAMETER(S) EXCEEDED

Explanation: Too many parameters have been specified for the keyword that is specified in the message. The command processor does not accept more than the limit (specified in the message as ‘nn’) of parameters. This error is probably caused by entering too many parameters. It could also be caused by a missing close parenthesis that has not yet been detected.

System Action: Processing for the command is terminated.

System Programmer Response: Reissue the command, and enter no more than the specified limit of parameters for the given keyword. If necessary, issue the command more than once to process all the desired parameter values. Refer to DB2 Command Reference for further details.

Problem Determination: Obtain a copy of the system or terminal log to verify the command entry.

**DSN9015I** PARAMETER parameter-value IS UNACCEPTABLE FOR KEYWORD keyword-name

Explanation: The parameter value specified in the message is not an acceptable value for the named keyword.

As an example, consider a keyword called PRINT that can have parameters of YES or NO. Specification of PRINT(YES) or PRINT(NO) is valid. However, specification of PRINT(MAYBE) is unacceptable.

System Action: Processing for the command is terminated.

System Programmer Response: Refer to DB2 Command Reference for a list of acceptable parameters. Correct and reissue the command.

Problem Determination: Obtain a copy of the system or terminal log to verify the command entry.

**DSN9016I** verb-name COMMAND REJECTED, UNAUTHORIZED REQUEST

Explanation: The command specified in the message (as ‘verb-name’) requires that you have proper authorization in order to use the command. You do not have the required authorization.

System Action: The command is not executed. Processing is terminated.

Operator Response: If the command must be executed on behalf of the user and your installation operating procedures permit it, enter the command on request.

System Programmer Response: Contact the system programmer responsible for system security, and request that this person grant you authorization to use the command. Otherwise, you must have someone who is authorized issue the command for you. If necessary, request the system operator to enter the command for you.

Problem Determination: Obtain a copy of the system or terminal log to verify the command entry.

**DSN9017I** FAILURE WHILE PROCESSING verb-name pkw-name COMMAND, PROCESSING TERMINATED

Explanation: The DB2 command processor has abended while processing the command (specified in the message as ‘verb-name pkw-name’). The error is been recorded in SYS1.LOGREC, and an SVC dump is requested. The command may have partially completed. Refer to any prior response messages to determine what has been done.

System Action: Processing for the command is terminated.

Operator Response: If a dump was produced, have it printed. Print a copy of the contents of the SYS1.LOGREC data set for the time period involved. Forward these items with a copy of the system log to the system programmer.

System Programmer Response: Reissue the command. If a second failure occurs, consult your supervisor.

Problem Determination: Obtain a copy of the system or terminal log to verify command entry. Contact the system operator to make sure that diagnostic information is forwarded to you.

**DSN9018I** csect-name ABORTING verb-name PROCESSING DUE TO INSUFFICIENT STORAGE AVAILABLE

Explanation: The command processor was unable to obtain sufficient storage to complete processing of any response messages generated by the invoked command.

System Action: Processing for the command is terminated abnormally.

Operator Response: Notify the system programmer before attempting to reissue the command.

System Programmer Response: Determine the reason for insufficient storage available to the command. If a cursory examination of the system indicates that the region sizes for DB2 are sufficient, and the current workload does not seem excessive, then a MVS Console dump (MVS DUMP command) may be required.

Insure that any retry steps defined by the command are performed prior to reissuing the command.

Problem Determination: The invoked command had completed processing and returned to the Command Preprocessor when an attempt was made to obtain storage from the address space from which the command was entered. Since sufficient storage was unavailable, no response messages from the invoked command are available.

**DSN9019I** VERB verb-name IS NOT A KNOWN COMMAND

Explanation: The command represented by the verb specified in the message is not known to the system; it is an undefined command. A possible cause for this error is that you made a spelling error while entering the command.

System Action: Processing for the command is terminated.

System Programmer Response: Refer to DB2 Command Reference for the correct command format.

Problem Determination: Obtain a copy of the system or terminal log to verify the command entry.
ONLY ONE OF THE FOLLOWING KEYWORDS MAY BE SPECIFIED ON THIS COMMAND,
keyword1 keyword2 keyword3 keyword4
keyword5 keyword6 keyword7 keyword8

Explanation: Only one of the identified keywords can be specified at the same time on this command.

System Action: Processing for the command is terminated.

System Programmer Response: Identify the appropriate keyword from the list, include only that keyword, and reissue the command. Refer to DB2 Command Reference for descriptions of the keywords.

Problem Determination: Obtain a copy of the system or terminal log to verify the command entry.

VERB verb-name REQUIRED KEYWORD IS MISSING

Explanation: The command specified in the message (as 'verb-name') was entered, but at least one required keyword is missing. The command processor was unable to determine which keyword or keywords were missing.

System Action: Processing for the command is terminated.

System Programmer Response: Refer to DB2 Command Reference for the proper format of the named command, and then reenter the command.

Problem Determination: Obtain a copy of the system or terminal log to verify command entry. If a failure is suspected, take a storage dump.

csect-name verb-name pkw-name NORMAL COMPLETION

Explanation: All synchronous processing for the command specified in the message as 'verb-name pkw-name' completed successfully. Any tasks executing asynchronously for the specified command might still be executing when this message is displayed.

System Action: Synchronous processing for the specified command is complete. Subsequent system actions defined by the command that can occur during the asynchronous phase of command processing are documented in DB2 Command Reference.

csect-name verb-name pkw-name ABNORMAL COMPLETION

Explanation: The command specified in the message as 'verb-name pkw-name' completed unsuccesfully. The command issued one or more error messages before this message. The name of the CSECT that issued the message is shown at the beginning of the message as a diagnostic aid.

System Action: Processing for the command ended.

System Programmer Response: Proceed as indicated by previous error messages.

KEYWORD keyword-name PARAMETER MAY NOT SPECIFY A RANGE OF VALUES

Explanation: The parameter of the keyword specified in the message specifies a range using the colon operator, (for instance, 1:3), but a range of values is not allowed.

As an example, consider a keyword called CLASS. You might enter CLASS(1,2,3) to specify classes 1, 2, and 3, or you might enter CLASS(1:3). However, not all commands allow you to specify a range of values.

System Action: Processing for the command is terminated.

System Programmer Response: Correct the keyword parameter, and reenter the command.

Problem Determination: Obtain a copy of the system or terminal log to verify command entry.

csect-name verb-name pkw-name NORMAL COMPLETION FOR SYNCHRONOUS PHASE, AND IN PROGRESS FOR ASYNCHRONOUS PHASE.

Explanation: All synchronous processing for the command specified as 'verb-name pkw-name' in this message completed successfully. Any tasks executing asynchronously for the specified command might still be executing when this message is displayed.

System Action: Synchronous processing for the specified command is complete. Subsequent system actions defined by the command that can occur during the asynchronous phase of command processing are documented in DB2 Command Reference.

KEYWORD keyword-name PARAMETER(S) MUST BE ALPHABETIC

KEYWORD keyword-name PARAMETER(S) MUST BE ALPHAMERIC

KEYWORD keyword-name PARAMETER(S) MUST BE NUMERIC

Explanation: Parameter values for the keyword (specified on these messages) must be of a specific type, such as all ALPHABETIC or all ALPHAMERIC / NATIONAL characters, or all NUMERIC values.

As an example of this type of error, consider the keyword NAME, where you are expected to enter a person's last name. If you enter NAME(Jones) it is acceptable, but if you enter NAME(Jon4s), it is not acceptable.

As a second example, consider a keyword WEIGHT that specifies a numeric weight. Entering WEIGHT(47) is acceptable, but entering WEIGHT(4u) is not.

System Action: Processing for the command is terminated.

System Programmer Response: Reissue the command but ensure that the parameters for the named keyword are of the required type.

Problem Determination: Obtain a copy of the system or terminal log to verify command entry.
DSN9029I  csect-name FAILURE WHILE PROCESSING A COMMAND

Explanation: A failure has been encountered while processing a command. The command may or may not have been executed. The error has been recorded in the system error log (the SYS1.LOGREC data set), and an SVC dump was attempted.

System Action: Processing for the command is terminated.

Operator Response: If a dump was produced, have it printed. Print a copy of the contents of the SYS1.LOGREC data set for the time period involved. Forward these items with a copy of the system log to the system programmer.

System Programmer Response: Reissue the command. If a second failure occurs, consult your supervisor or the system programmer.

Problem Determination: Obtain a copy of the system or terminal log to verify command entry. Contact the system operator to make sure that diagnostic information is forwarded to the system programmer.

DSN9030I  KEYWORD keyword-name PARAMETER MAY NOT SPECIFY A SUBSET OF VALUES

Explanation: The parameter for the keyword specified in the message identifies a subset using the asterisk operator (for instance, ABC*, "ABC", or "ABC"DEF*), but using a subset is not allowed for this command.

As an example, consider a keyword called NAME, for which you can specify people's names. You might specify NAME(ROBERT ROBERT'S ROBERTSON) to enter three names, or you might specify NAME(ROB*) to indicate all names that begin with the characters ROB. NAME("BERT") could also be specified to indicate all names that contain the characters BERT within the name. However, not all commands allow you to specify a subset of values in this way.

System Action: Processing for the command is terminated.

System Programmer Response: Correct the keyword parameter, and reenter the command.

Problem Determination: Obtain a copy of the system or terminal log to verify command entry.

DSN9031I  SYNTAX ERROR DETECTED FOLLOWING KEYWORD keyword-name

Explanation: The text that follows the named keyword contains invalid syntax.

As an example, consider specification of CLASS= A. The double equal signs do not conform to the rules of syntax and make the keyword meaningless. This is just one example of invalid syntax. It is not practical to try to illustrate every possible error here. You could, however, correctly specify CLASS=A or CLASS(A).

System Action: Processing for the command is terminated.

System Programmer Response: Examine the text following the named keyword to ensure that no errors were made as the command was entered. Ensure that you have followed the rules for command entry, and reenter the command.

Problem Determination: Obtain a copy of the system or terminal log to verify command entry.

DSN9032I  REQUESTED FUNCTION IS NOT AVAILABLE

Explanation: An attempt was made to invoke a command processor that was not loaded. An example of this is invoking -START DDF or -STOP DDF when DDF is not loaded (not selected during the installation process).

System Action: The requested function is not performed.

User Response: Determine what function was requested. Do not invoke this function until DB2 is reinstalled and DDF is selected.

Problem Determination: Look at the console log to determine which command caused the error.

DSN9033I  KEYWORD name1 REQUIRES KEYWORD name2

Explanation: When keyword 'name1' is specified, keyword 'name2' must also be specified.

System Action: Processing for the command terminates.

User Response: Resubmit the command with the missing keyword.

Problem Determination: Obtain a copy of the system or terminal log to verify command entry.

DSN9034I  THE TOTAL LENGTH OF COMMAND RESPONSE MESSAGES EXCEEDED ITS LIMIT. DISPLAY IS TERMINATED.

Explanation: The total length of all response messages returned from a single DB2 command exceeded the internal limit set by the system. The message chain was truncated. This message was appended at the end of the chain to inform the user of the termination of the report.
### Section 4. DB2 Codes

<table>
<thead>
<tr>
<th>Code Range</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>X'C1......'</td>
<td>579</td>
</tr>
<tr>
<td>X'C2......'</td>
<td>581</td>
</tr>
<tr>
<td>X'C3......'</td>
<td>589</td>
</tr>
<tr>
<td>X'C5......'</td>
<td>619</td>
</tr>
<tr>
<td>X'C6......'</td>
<td>623</td>
</tr>
<tr>
<td>X'D1......'</td>
<td>627</td>
</tr>
<tr>
<td>X'D5......'</td>
<td>627</td>
</tr>
<tr>
<td>X'D6......'</td>
<td>629</td>
</tr>
<tr>
<td>X'D7......'</td>
<td>631</td>
</tr>
<tr>
<td>X'D9......'</td>
<td>657</td>
</tr>
<tr>
<td>X'D3......'</td>
<td>691</td>
</tr>
<tr>
<td>X'D4......'</td>
<td>691</td>
</tr>
<tr>
<td>X'D6......'</td>
<td>807</td>
</tr>
<tr>
<td>X'D7......'</td>
<td>813</td>
</tr>
<tr>
<td>X'D9......'</td>
<td>815</td>
</tr>
<tr>
<td>X'E1......'</td>
<td>823</td>
</tr>
<tr>
<td>X'E2......'</td>
<td>839</td>
</tr>
<tr>
<td>X'E3......'</td>
<td>849</td>
</tr>
<tr>
<td>X'E4......'</td>
<td>863</td>
</tr>
<tr>
<td>X'E5......'</td>
<td>905</td>
</tr>
<tr>
<td>X'E6......'</td>
<td>923</td>
</tr>
<tr>
<td>X'E6......'</td>
<td>925</td>
</tr>
<tr>
<td>X'E7......'</td>
<td>933</td>
</tr>
<tr>
<td>X'E8......'</td>
<td>937</td>
</tr>
<tr>
<td>X'E9......'</td>
<td>949</td>
</tr>
<tr>
<td>X'E6......'</td>
<td>961</td>
</tr>
<tr>
<td>X'E6......'</td>
<td>963</td>
</tr>
<tr>
<td>X'E6......'</td>
<td>965</td>
</tr>
<tr>
<td>X'E7......'</td>
<td>1001</td>
</tr>
<tr>
<td>X'E7......'</td>
<td>1005</td>
</tr>
</tbody>
</table>
Section 4. DB2 Codes

This section contains DB2 abend reason codes and reason codes. In addition, this section contains DB2 instrumentation facility interface reason codes. Conventions used in DB2 abend reason codes are described in "Section 1. Introduction" on page 1.
X'C1......' Codes

00C10002
Explanation: The DB2 call attachment facility control block (the CAB) indicated that a thread was present when it should not have been present.
This abend reason code is issued by the following CSECT: DSNACA00
User Response: Notify your system programmer.
System Programmer Response: Collect a DSNTRACE trace stream and request a SYSABEND or SYSUDUMP dump.
Problem Determination: This is probably a call attachment facility error.

00C10003
Explanation: The DB2 call attachment facility received control after a nonstandard entry that did not use the call attachment facility language interface.
This abend reason code is issued by the following CSECT: DSNACA00
User Response: Modify or repair your application so that DSNACA00, the main call attachment facility code will receive control only through the language interface.
Problem Determination: This is probably a user error.

00C10004
Explanation: The call attachment facility encountered an error retrieving a trace message during processing of a call attachment facility request.
This abend reason code is issued by the following CSECT: DSNACA00
User Response: Notify your system programmer.
System Programmer Response: Collect a DSNTRACE trace stream and request a SYSABEND or SYSUDUMP dump.
Problem Determination: This is probably a call attachment facility error.

00C10005
Explanation: The application program passed an ECB address of 0 to the call attachment facility on a CONNECT call. The trace message preceding the abend indicates whether the ECB was a start-up or termination ECB.
This abend reason code is issued by the following CSECT: DSNACA00
User Response: Correct the application program that makes the CONNECT call to DSNALI. Ensure that the CONNECT call uses a valid ECB address.
Problem Determination: See the Explanation above.

00C10201
Explanation: The application program passed two CONNECT calls to the call attachment facility (CAF) from the same TCB. The first CONNECT could have been either implicit or explicit.
This abend reason code is issued by the following CSECT: DSNACA00
User Response: You can continue processing with a corrected request.
Problem Determination: See the Explanation above.

00C10202
Explanation: The application program passed two OPEN commands to the call attachment facility (CAF) from the same TCB. The first OPEN could have been either implicit or explicit.
This abend reason code is issued by the following CSECT: DSNACA00
User Response: You can continue processing with a corrected request.
Problem Determination: See the Explanation above.

00C10203
Explanation: A CLOSE command was issued when there was no active OPEN.
This abend reason code is issued by the following CSECT: DSNACA00
User Response: You can continue processing with a corrected request.
Problem Determination: See the Explanation above.

00C10204
Explanation: A DISCONNECT command was issued when there was no active CONNECT.
This abend reason code is issued by the following CSECT: DSNACA00
User Response: You can continue processing with a corrected request.
Problem Determination: See the Explanation above.

00C10205
Explanation: A TRANSLATE command was issued when the DB2 subsystem was not connected to the call attachment facility (CAF).
This abend reason code is issued by the following CSECT: DSNACA00
User Response: You can continue processing with a corrected request.
Problem Determination: See the Explanation above.
Explanation: One of the following conditions exists:

- The wrong number of parameters were issued.
- The end-of-list bit was off.

This abend reason code is issued by the following CSECT: DSNACA00

User Response: You can continue processing with a corrected request.

Problem Determination: See the Explanation above.

Explanation: The application program passed an unrecognized function parameter to the call attachment facility (CAF).

This abend reason code is issued by the following CSECT: DSNACA00

User Response: You can continue processing with a corrected request.

Problem Determination: See the Explanation above.

Explanation: The call attachment facility (CAF) received requests from the same TCB to CONNECT to the DB2 subsystem and to another subsystem.

This abend reason code is issued by the following CSECT: DSNACA00

User Response: You can continue processing with a corrected request.

Problem Determination: See the Explanation above.

Explanation: The call attachment facility (CAF) received an explicit call to DSNALI from a DB2 stored procedure. This is not allowed.

This abend reason code is issued by the following CSECT: DSNACA00

User Response: You can continue processing with a corrected request.

Problem Determination: This is a user error.

Explanation: The call attachment facility (CAF) has detected a release level incompatibility between itself and DB2. Either the current CAF or DB2 release levels do not support coexistence, or the SPE level of the lower level release does not meet the compatibility requirements for coexistence between the two releases.

This reason code is issued by the following CSECT: DSNACA70

System Action: The connection is not successful.

User Response: If you used JCL or a TSO logon procedure to invoke CAF, check to insure the correct DB2 libraries are defined in your JOBLIB and STEPLIB allocations. See your system programmer if you invoke CAF using procedures supplied by your system programmer.

Problem Determination: If CAF trace (DSNTRACE) is active, message DSNA831E will indicate the release levels of CAF and the DB2 subsystem.

Explanation: The DB2 RRSAF attachment facility function AUTH SIGNON was invoked by a program that was not APF authorized. This condition can indicate a security violation.

System Action: The application is abended.

User Response: The AUTH SIGNON function can only be invoked from an APF authorized program. Either modify your program to use the RRSAF attachment facility function SIGNON which may be invoked from a non-authorized program, or contact your security administrator to make the changes required to make your program an APF authorized program.

Problem Determination: This is a user error.

Explanation: An abend has occurred during an attempt to access the caller-provided subsystem name parameter while executing in the PSW key of the caller. This is probably the result of a logic error in the requesting program.

System Action: The application is abended.

User Response: A dump should be taken for problem analysis.

Problem Determination: This reason code is placed in register 15 during any access to caller-provided information. When any abend occurs, this register indicates which parameter caused the error.

This abend reason code is issued by the following CSECT: DSNARA00

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 5, 49.
**00C12003**

**Explanation:** An abend has occurred during an attempt to access the caller-provided *ribptr* parameter while executing in the PSW key of the caller. This is probably the result of a logic error in the requesting program.

**System Action:** The application is abended.

**User Response:** A dump should be taken for problem analysis.

**Problem Determination:** This reason code is placed in register 15 during any access to caller-provided information. When any abend occurs, this register indicates which parameter caused the error.

This abend reason code is issued by the following CSECT: DSNARA00

Collect the following diagnostic items listed in Appendix B

"Problem determination" on page 1051 1, 5, 49.

---

**00C12004**

**Explanation:** An abend has occurred during an attempt to access the caller-provided *ribptr* parameter while executing in the PSW key of the caller. This is probably the result of a logic error in the requesting program.

**System Action:** The application is abended.

**User Response:** A dump should be taken for problem analysis.

**Problem Determination:** This reason code is placed in register 15 during any access to caller-provided information. When any abend occurs, this register indicates which parameter caused the error.

This abend reason code is issued by the following CSECT: DSNARA00

Collect the following diagnostic items listed in Appendix B

"Problem determination" on page 1051 1, 5, 49.

---

**00C12005**

**Explanation:** The DB2 RRSAF attachment facility received control after a nonstandard entry that did not use the call attachment facility language interface.

**System Action:** The application is abended.

**User Response:** Modify or repair your application so that DSNACA00, the main call attachment facility code, will receive control only through the language interface.

**Problem Determination:** This is probably a user error.

This abend reason code is issued by the following CSECT: DSNARA00

Collect the following diagnostic items listed in Appendix B

"Problem determination" on page 1051 1, 5, 49.

---

**00C12006**

**Explanation:** An abend has occurred during an attempt to access the caller-provided termination ECB parameter while executing in the PSW key of the caller. This is probably the result of a logic error in the requesting program.

**System Action:** The application is abended.

**User Response:** A dump should be taken for problem analysis.

**Problem Determination:** This reason code is placed in register 15 during any access to caller-provided information. When any abend occurs, this register indicates which parameter caused the error.

This abend reason code is issued by the following CSECT: DSNARA00

Collect the following diagnostic items listed in Appendix B

"Problem determination" on page 1051 1, 5, 49.
**Explanation:** An abend has occurred during an attempt to access the caller-provided accounting interval parameter while executing in the PSW key of the caller. This is probably the result of a logic error in the requesting program.

**System Action:** The application is abended.

**User Response:** A dump should be taken for problem analysis.

**Problem Determination:** This reason code is placed in register 15 during any access to caller-provided information. When any abend occurs, this register indicates which parameter caused the error.

This abend reason code is issued by the following CSECT: DSNARA00

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 5, 49.

---

**Explanation:** An abend has occurred during an attempt to access the caller-provided authid parameter while executing in the PSW key of the caller. This is probably the result of a logic error in the requesting program.

**System Action:** The application is abended.

**User Response:** A dump should be taken for problem analysis.

**Problem Determination:** This reason code is placed in register 15 during any access to caller-provided information. When any abend occurs, this register indicates which parameter caused the error.

This abend reason code is issued by the following CSECT: DSNARA00

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 5, 49.

---

**Explanation:** An abend has occurred during an attempt to access the caller-provided secondary authid parameter while executing in the PSW key of the caller. This is probably the result of a logic error in the requesting program.

**System Action:** The application is abended.

**User Response:** A dump should be taken for problem analysis.

**Problem Determination:** This reason code is placed in register 15 during any access to caller-provided information. When any abend occurs, this register indicates which parameter caused the error.

This abend reason code is issued by the following CSECT: DSNARA00

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 5, 49.

---

**Explanation:** An abend has occurred during an attempt to access the caller-provided ACEE parameter while executing in the PSW key of the caller. This is probably the result of a logic error in the requesting program.

**System Action:** The application is abended.

**User Response:** A dump should be taken for problem analysis.

**Problem Determination:** This reason code is placed in register 15 during any access to caller-provided information. When any abend occurs, this register indicates which parameter caused the error.

This abend reason code is issued by the following CSECT: DSNARA00

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 5, 49.

---

**Explanation:** An abend has occurred during an attempt to access the caller-provided plan name parameter while executing in the PSW key of the caller. This is probably the result of a logic error in the requesting program.

**System Action:** The application is abended.

**User Response:** A dump should be taken for problem analysis.

**Problem Determination:** This reason code is placed in register 15 during any access to caller-provided information. When any abend occurs, this register indicates which parameter caused the error.

This abend reason code is issued by the following CSECT: DSNARA00

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 5, 49.

---

**Explanation:** An abend has occurred during an attempt to access the caller-provided collection parameter while executing in the PSW key of the caller. This is probably the result of a logic error in the requesting program.

**System Action:** The application is abended.

**User Response:** A dump should be taken for problem analysis.

**Problem Determination:** This reason code is placed in register 15 during any access to caller-provided information. When any abend occurs, this register indicates which parameter caused the error.

This abend reason code is issued by the following CSECT: DSNARA00

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 5, 49.
00C12016

Explanation: An abend has occurred during an attempt to access the caller-provided reuse parameter while executing in the PSW key of the caller. This is probably the result of a logic error in the requesting program.

System Action: The application is abended.

User Response: A dump should be taken for problem analysis.

Problem Determination: This reason code is placed in register 15 during any access to caller-provided information. When any abend occurs, this register indicates which parameter caused the error.

This abend reason code is issued by the following CSECT: DSNARA00

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 5, 49.

00C12018

Explanation: An abend has occurred during an attempt to access the caller-provided user-id parameter while executing in the PSW key of the caller. This is probably the result of a logic error in the requesting program.

System Action: The application is abended.

User Response: A dump should be taken for problem analysis.

Problem Determination: This reason code is placed in register 15 during any access to caller-provided information. When any abend occurs, this register indicates which parameter caused the error.

00C12019

Explanation: An abend has occurred during an attempt to access the caller-provided applname parameter while executing in the PSW key of the caller. This is probably the result of a logic error in the requesting program.

System Action: The application is abended.

User Response: A dump should be taken for problem analysis.

Problem Determination: This reason code is placed in register 15 during any access to caller-provided information. When any abend occurs, this register indicates which parameter caused the error.

00C12020

Explanation: An abend has occurred during an attempt to access the caller-provided ws parameter while executing in the PSW key of the caller. This is probably the result of a logic error in the requesting program.

System Action: The application is abended.

User Response: A dump should be taken for problem analysis.

Problem Determination: This reason code is placed in register 15 during any access to caller-provided information. When any abend occurs, this register indicates which parameter caused the error.

# 00C12021

Explanation: An abnormal termination has occurred during an attempt to access the caller-provided xid parameter while executing in the PSW key of the caller. This is probably the result of a logic error in the requesting program.

System Action: The application is abnormally terminated.

User Response: Correct the problem and submit your job again.

Problem Determination: This reason code is placed in register 15 during any access to caller-provided information. Register 15 indicates which parameter caused the error when any abnormal termination occurs.

00C12021

Explanation: The application program invoked IDENTIFY while it was already connected to DB2.

User Response: You can continue processing with a corrected request.

Problem Determination: This reason code is issued by the following CSECT: DSNARA00

00C12022

Explanation: The application program invoked the CREATE THREAD function request while there was already a thread created.

User Response: You can continue processing with a corrected request.

Problem Determination: This reason code is issued by the following CSECT: DSNARA00

00C12023

Explanation: A TERMINATE THREAD command was issued when there was no active thread.

User Response: You can continue processing with a corrected request.

Problem Determination: This reason code is issued by the following CSECT: DSNARA00

00C12024

Explanation: The application issued a function request other than IDENTIFY when no connection with DB2 existed. Only IDENTIFY may be issued when a connection does not exist.

User Response: You can continue processing with a corrected request.

Problem Determination: This reason code is issued by the following CSECT: DSNARA00

00C12025

Explanation: The task that invoked the DB2 RRSAF attachment facility function SWITCH TO has not yet identified to the DB2 subsystem specified in the request.

System Action: The SWITCH TO function is performed.

User Response: Use IDENTIFY to connect to a DB2 subsystem before attempting to invoke any other function at the specified subsystem.
Problem Determination: This reason code is issued by the following CSECT: DSNARA00

00C12206
Explanation: One of the following conditions exists:
- The wrong number of parameters were issued.
- The end-of-list bit was off.
User Response: You can continue processing with a corrected request.

Problem Determination: This reason code is issued by the following CSECT: DSNARA00

00C12207
Explanation: The application program either omitted the function name parameter or passed an unrecognized function parameter to the RRSAF.
System Action: The application is abended.
User Response: Modify or repair your application to pass a valid function request to RRSAF.

Problem Determination: This reason code is issued by the following CSECT: DSNARA00

00C12208
Explanation: The application program issued an IDENTIFY function request but omitted the ribptr parameter from the parameter list. An ribptr parameter is a required parameter on an IDENTIFY request.
System Action: The IDENTIFY request is rejected.
User Response: You can continue processing with a corrected request.

Problem Determination: This reason code is issued by the following CSECT: DSNARA00

00C12209
Explanation: The application program issued an IDENTIFY function request but omitted the eibptr parameter from the parameter list. An eibptr parameter is a required parameter on an IDENTIFY request.
System Action: The IDENTIFY request is rejected.
User Response: You can continue processing with a corrected request.

Problem Determination: This reason code is issued by the following CSECT: DSNARA00

00C12212
Explanation: The application program issued a CREATE THREAD function request and did not specify a plan name and also did not specify a collection name. If a plan name is not provided, then a collection name must be supplied.
User Response: You can continue processing with a corrected request.

Problem Determination: This reason code is issued by the following CSECT: DSNARA00

00C12214
Explanation: The application program issued a TRANSLATE function request but omitted the sqlca parameter from the parameter list. An sqlca parameter is a required parameter on a TRANSLATE request.
User Response: You can continue processing with a corrected request.

Problem Determination: This reason code is issued by the following CSECT: DSNARA00

00C12216
Explanation: The application program issued an SQL or IFI function request without a DB2 connection. SQL or IFI requests cannot be issued until IDENTIFY, SIGNON and CREATE THREAD processing have been completed.
User Response: You can continue processing with a corrected request.

Problem Determination: This reason code is issued by the following CSECT: DSNARA00

00C12217
Explanation: The application program issued a CREATE THREAD function request without having completed SIGNON processing. At least one successful SIGNON must be completed before a CREATE THREAD request can be issued.
User Response: You can continue processing with a corrected request.

Problem Determination: This reason code is issued by the following CSECT: DSNARA00

00C12218
Explanation: The application program issued an SQL or IFI function request without completing SIGNON and CREATE THREAD processing. SQL or IFI requests cannot be issued until SIGNON and CREATE THREAD processing is complete.
User Response: You can continue processing with a corrected request.

Problem Determination: This reason code is issued by the following CSECT: DSNARA00

00C12219
Explanation: The application program issued an SQL or IFI function request without completing CREATE THREAD processing. SQL or IFI requests cannot be issued until CREATE THREAD processing is complete.
User Response: You can continue processing with a corrected request.

Problem Determination: This reason code is issued by the following CSECT: DSNARA00

586 Messages and Codes
00C12822
Explanation: The RRSAF received an explicit call to DSNRLI from a DB2 stored procedure. This is not allowed.
User Response: You can continue processing with a corrected request.
Problem Determination: This reason code is issued by the following CSECT: DSNARA00

00C12823
Explanation: An attempt was made to initiate a stored procedure for a task, but one already exists. This is not allowed.
User Response: You can continue processing with a corrected request.
Problem Determination: This reason code is issued by the following CSECT: DSNARA00

00C12824
Explanation: The previous connection to DB2 has been terminated. Cleanup processing was performed and the RRSAF is now ready to process additional IDENTIFY requests.
User Response: You can continue processing, and issue an IDENTIFY request.
Problem Determination: This reason code is issued by the following CSECT: DSNARA00

00C12825
Explanation: An attempt was made to terminate a stored procedure for a task, but no stored procedure exists. This is not allowed.
User Response: You can continue processing with a corrected request.
Problem Determination: This reason code is issued by the following CSECT: DSNARA00

00C12831
Explanation: The release of the RRSAF code is not compatible with the earlier release of the DB2 program.
System Action: The connection is not made.
User Response: Ensure that the release of the RRSAF library is not later than the release of DB2 to which you are attempting to connect.
Problem Determination: This problem can be caused by improper DB2 data set allocation in a LOGON procedure or CLIST.
This reason code is issued by the following CSECT: DSNARA70
**X'C2......' Codes**

**00C20021**

**Explanation:** A member of a DB2 data sharing group was unable to perform a global drain because a physical close failure occurred in a peer DB2 due to an exceptional state or CASTOUT process failure. DSNT501I is sent to the console to report the condition.

**System Action:** A ‘resource not available’ return code, reason code, and object name are sent back to the requesting function.

This returned reason code is issued by the following CSECT: DSNB1LDA

**00C20031**

**Explanation:** An attempt to acquire a page latch in either shared mode or exclusive mode was rejected due to a time-out on the agent's wait time.

**System Action:** A ‘resource not available’ return code, reason code, and object name are sent back to the requesting function.

**System Programmer Response:** A diagnostic dump with reason code 00C2010F should follow 00C20031.

This reason code is issued by the following CSECTs: DSNB1LTX, DSNB1LTS

**00C20069**

**Explanation:** DB2 is unable to perform the drain function on an object (a table space, an index space, or a partition) because a DB2 member in the data sharing group was in the process of restarting.

**System Action:** If the problem was encountered by DB2 when trying to automatically recover a group buffer pool recovery pending (GRECP) object following the failure of a group buffer pool (GBP), then DB2 issues message DSNB350I or DSNB351I to the console with this reason code indicating that the object cannot be automatically recovered.

Otherwise, a ‘resource not available’ return code, reason code, and object name are sent back to the requesting function. DSNT501I is sent to the console to report the condition.

**System Programmer Response:** If DSNB350I or DSNB351I messages were issued, wait for the failed DB2 member to complete its restart processing and then recover the GRECP objects as indicated in the “System Programmer Response” for DSNB350I or DSNB351I.

**00C2006A**

**Explanation:** DB2 was unable to perform the drain function on an object (table space, index space, or partition) because the object was held by one or more indoubt threads.

**System Action:** If the problem was encountered by DB2 when trying to automatically recover a group buffer pool recovery pending (GRECP) object following the failure of a group buffer pool (GBP), then DB2 issues message DSNB350I or DSNB351I to the console with this reason code indicating that the object cannot be automatically recovered.

**System Programmer Response:** Use the DB2 DISPLAY DB CLAIMERS command to find the indoubt threads. If the threads have been left indoubt because DB2 or a transaction manager was unable to automatically resolve the indoubts, you can use the DB2 RECOVER INDOUBT command to resolve the indoubt thread and remove the indoubt claimer on the object (the DB2 RECOVER INDOUBT command should only be used when automatic resolution does not work).

If DSNB350I or DSNB351I messages were issued, then after you resolve the indoubt threads, recover the GRECP objects as indicated in the “System Programmer Response” for DSNB350I or DSNB351I.

**00C200A1**

**Explanation:** This is a DB2 internal error. The caller of the buffer manager (BM) is trying to release a page latch that is not currently held.

This abend reason code is issued by the following CSECTs:

```
DSNB1REL DSNB1RWI DSNB DSNICLAP
DSNICUMW DSNICUR DSNIDLIS DSNIDLEO
DSNIFFRE DSNIFNP DSNILGLOK DSNILGBW
DSNILREP DSNILSMG DSNIMSICU DSNIMSBW
DSNIO6L2 DSNOW DSNIPOCI DSNIRELS
DSNIRELU DSNIREPR DSNIRFNFX DSNISEGD
DSNISEGF DSNISFS DSNISFXL DSNISGAU
DSNISGFO DSNISGNS DSNISGR DSNISGSU
DSNISMFO DSNISMR DSNISMSU DSNIUPPR
DSNUISME DSNIOP
```

**System Action:** The requesting application process is abended.

**Operator Response:** Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

**System Programmer Response:** Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, “Problem determination on page 1051” 1, 2, 5.

**00C200A2**

**Explanation:** This is a DB2 internal error. The caller of the buffer manager (BM) is trying to get a page latch that is currently held on the requesting page.

This abend reason code is issued by the following CSECTs:

```
DSNB1GET DSNB1SWS DSNB1GNV DSNB1LTC
DSNB DSNICLAP DSNICUMW DSNICUR
DSNIDFR DSNIFFRE DSNIFNP DSNILGLOK
DSNILSMG DSNILSMU DSNIMSBW DSNIRELS
DSNIRELU DSNIREPR DSNIRFNFX DSNIRELS
DSNISEGF DSNISFS DSNISFXL DSNISGAU
DSNISGFO DSNISGNS DSNISGR DSNISGSU
DSNUISME DSNIOP
```

**System Action:** The requesting application process is abended.

**Operator Response:** Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

**System Programmer Response:** Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2, 5.

00C200A3

Explanation: This is a DB2/MVS internal error. The execution unit driving a buffer manager (BM) asynchronous function, which would normally run indefinitely, has been canceled. However, work being done by the execution unit is allowed to complete before the execution unit terminates.

This abend reason code is issued by the following CSECTs:
DSNB1CMS DSNB5COM DSNB5RAP

System Action: The affected asynchronous function is terminated. If the affected function is the deferred write processor (DSNB1CMS), DB2 is abended with the abend code '00C200D3'.

Operator Response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump. Start DB2 if it is abended.

System Programmer Response: Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2, 5.

00C200A4

Explanation: This code usually indicates a problem internal to DB2; however, the problem can result from errors in other products. An unexpected reason code was returned by the media manager function when it was invoked to process a database I/O request.

System Action: The requesting execution unit is abended.

User Response: Notify the system programmer and rerun the application.

Operator Response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

Problem Determination: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

The unexpected media manager reason code is saved in register 8.

Check the MVS console log for an IOS error message indicating the type of I/O error that occurred. If an IOS message was issued, follow the problem determination directions for that message.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2, 5, 10, 12.

This abend reason code is issued by the following CSECTs:
DSNB5COM DSNB5FOR DSNB5RAP DSNB5RDP DSNB5PCO

00C200A5

Explanation: Typically, this indicates a problem internal to DB2; however, the problem can result from errors in other products. DB2 was unable to drain a pageset in preparation for page set cleanup processing. This might be caused by one of the following:
- An IRLM out-of-storage condition
- An internal error in the lock acquisition function

This abend reason code is issued by the following CSECT: DSNB1CFC

System Action: The execution unit driving this function proceeds normally. The abend status is recorded in SYS1.LOGREC.

Operator Response: Notify the system programmer and print the SYS1.LOGREC.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Restart DB2.

Problem Determination: The unexpected reason code returned by the drain function in register 8 might help determine the cause of the problem. If the problem is caused by an unavailable DB2 resource, message DSNT500I might also be issued.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 5.

00C200A6

Explanation: This is a DB2/MVS internal error. The execution unit scheduled by the buffer manager (BM) subcomponent of DB2 to drive the page set cleanup function has been canceled. This abend reason code is issued by the following CSECT: DSNB1CFC

System Action: DB2 is abended.

Operator Response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump. Restart DB2.

System Programmer Response: Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Refer to similar reason code '00E50013'.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2, 5.

00C200A8

Explanation: An error code other than timeout, insufficient storage, or an MVS system error was returned by the IRLM LOCK request invoked by DB2 to acquire any of the following locks:
- SYSLGRNG or SYSLGRNX recording lock on a table space
- Group buffer pool-dependent conversion lock on a page set or partition
- Group buffer pool start or stop lock
- ALTER BUFFERPOOL lock

This is a DB2 or IRLM internal error.

System Action: The requesting execution unit abends.
User Response: Notify the system programmer and rerun the application.

Operator Response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

Problem Determination: Refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

This abend reason code is issued by the following CSECTs: DSNB1SCR, DSNB1DLK

---

**00C200A9**

Explanation: A return code greater than 4 was returned by the IRLM UNLOCK request invoked by DB2 to release any of the following locks:

- SYSLGRNG or SYSLGRNX recording lock on a table space
- Group buffer pool dependent conversion lock on a page set or partition
- Group buffer pool start or stop lock
- ALTER BUFFERPOOL lock.

This is a DB2 or IRLM error.

System Action: The requesting execution unit is abended.

User Response: Notify the system programmer and rerun the application.

Operator Response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

Problem Determination: Refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The unexpected IRLM reason code is saved in register 8. It might help determine the cause of the error.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 5.

This abend reason code is issued by the following CSECTs: DSNB1SCR, DSNB1DLK

---

**00C200AA**

Explanation: This is a DB2 internal error. The caller of the buffer manager (BM) is trying to change a page latch type, but the requesting agent already holds this latch type on this page.

This abend reason code is issued by the following CSECT: DSNBCLTH

System Action: The requesting application process is abended.

Operator Response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

Problem Determination: Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 5.

---

**00C200AE**

Explanation: This is a DB2 internal error. The caller of the buffer manager (BM) is trying to get another page latch, which would cause the total number of page latches held by the caller to exceed the maximum allowable number of 2.

This abend reason code is issued by the following CSECTs: DSNBLTCH DSNB2LTH

System Action: The requesting application process is abended.

Operator Response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

System Programmer Response: Refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 5.
00C200AF

**Explanation:** This is a DB2 internal error. The caller of the buffer manager (BM) is attempting to update a page under the critical mode without holding an exclusive latch on the page. This abend reason code is issued by the following CSECT: DSNB1SWS

**System Action:** The requesting application process is abended.

**Operator Response:** Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

**System Programmer Response:** Refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, ”Problem determination” on page 1051 1, 2, 5.

00C200B0

**Explanation:** Typically, this indicates a problem internal to DB2, however the problem can result from errors in other products. The buffer address passed by the buffer manager (BM) invokers does not contain the requested page. The buffer manager detected this error by comparing the information stored in the buffer control block (BB) with the information passed with the buffer manager by its invokers. The information that is compared is the page set piece block, the page number, and the buffer address.

This abend reason code is issued by the following CSECTs: DSNB1REL DSNB1RWI DSNB1SWS DSNB1GNV DSNB5COM

**System Action:** The requesting execution unit is abended.

**Operator Response:** Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** The following general purpose registers (GPRs) contain the indicated diagnostic information:

<table>
<thead>
<tr>
<th>GPR</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Address of the page buffer</td>
</tr>
<tr>
<td>8</td>
<td>Address of the page set block (PB)</td>
</tr>
</tbody>
</table>

Collect the following diagnostic items listed in Appendix B, ”Problem determination” on page 1051 1, 2, 5, 10, 12.

00C200B1

**Explanation:** This is a DB2 internal error. Either the buffer manager (BM) subcomponent of DB2 is unable to locate the requesting page in the buffer pool or the invoker of the buffer manager is attempting to decrease the buffer use count which is already 0.

This abend reason code is issued by the following CSECTs: DSNB1REL DSNB1RWI DSNB1SWS

**System Action:** The requesting execution unit is abended.

**Operator Response:** Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

**System Programmer Response:** Refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, ”Problem determination” on page 1051 1, 2, 5.

00C200B2

**Explanation:** This is a DB2 internal error. The buffer’s write intent count is already 0 and the buffer manager (BM) invoker is attempting to decrease it.

This abend reason code is issued by the following CSECT: DSNB1RWI

**System Action:** The requesting execution unit is abended.

**Operator Response:** Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

**System Programmer Response:** Refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, ”Problem determination” on page 1051 1, 2, 5.

00C200B3

**Explanation:** This is a DB2 internal error. The buffer manager (BM) subcomponent of DB2 is unable to open a page set required by the requesting function. The page size or the page set piece size passed by the buffer manager invoker is invalid. The page set piece size is expressed by n, where 2 to the power of n is the total number of pages that can be contained within a page set piece. This error was detected during open page set processing.

This abend reason code is issued by the following CSECT: DSNB1OPS

**System Action:** The requesting execution unit is abended.

**Operator Response:** Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

**System Programmer Response:** Refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, ”Problem determination” on page 1051 1, 2, 5.

00C200B4

**Explanation:** This is a DB2 internal error. The buffer manager (BM) subcomponent of DB2 is unable to open a page set required by the requesting function. The highest page set piece number passed by the buffer manager invoker exceeds the maximum value allowed. The maximum number of data sets that can be defined for a given page set is dependent on the page set piece size. This error was detected during open page set processing.

This abend reason code is issued by the following CSECT: DSNB1OPS

**System Action:** The requesting execution unit is abended.
Problem Determination: Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 2, 5.

00C200B5
Explanation: This is a DB2 internal error. The buffer manager (BM) subcomponent of DB2 is unable to open a page set required by the requesting function. During the open page set processing, the page set options passed by the buffer manager invoker were in conflict with the same page set that was opened earlier. The page set options are the writing protocol (SYSTEM or UW), the recovery option (recoverable or unrecoverable), and the page size.
This abend reason code is issued by the following CSECT: DSNB1OFA
System Action: The requesting execution unit is abended.
Operator Response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.
System Programmer Response: Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

00C200B6
Explanation: Typically, this indicates a problem internal to DB2; however, the problem can result from errors in other products. The buffer manager (BM) subcomponent of DB2 is unable to reallocate a data set that is required after extending a data set to a new volume. The data set reallocation was requested and the corresponding data set was not opened.
This error was detected during open page set processing.
This abend reason code is issued by the following CSECT: DSNB1OPP
System Action: The requesting execution unit is abended.
Operator Response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.
System Programmer Response: Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

00C200B7
Explanation: Typically, this indicates a problem internal to DB2; however, the problem can result from errors in other products. The buffer manager (BM) subcomponent of DB2 is unable to open a page set required by the requesting function. The linear page set was not formatted contiguously. This error was detected during open page set processing.
This abend reason code is issued by the following CSECT: DSNB1OPS
System Action: The requesting execution unit is abended.
Operator Response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.
System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

00C200B8
Explanation: This is a DB2 internal error. DB2 is unable to update the SYSLGRNG or SYSLGRNX page set. The utility returned an unexpected reason code.
This abend reason code is issued by the following CSECT: DSNB1SW5
System Action: A 'resource not available' code is returned. This reason code and the table space name are recorded in the cursor table (CT) and made available to the user in the SQLCA or in messages.
System Programmer Response: Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

00C200BA
Explanation: This is a DB2 internal error. DB2 has encountered an unexpected error while attempting to access a system page of a page set.
This abend reason code is issued by the following CSECTs: DSNB1CPP, DSNB1OPP
System Action: The requesting execution unit is abended. The SVC dump and the SYS1.LOGREC recording are requested.
Operator Response: Notify the system programmer, print the SYS1.LOGREC and the SVC dump.
System Programmer Response: Refer to Section 3 of DB2 Diagnosis Guide and Reference for failure for information on identifying and reporting the problem.

**00C200BB**

**Explanation:** This is a DB2 internal error to indicate that an invalid buffer pool ID is specified.

This abend reason code is issued by the following CSECT: DSNBRBPA

**System Action:** The requesting application process is abended.

**Operator Response:** Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

**System Programmer Response:** Refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2, 5.

---

**00C200BC**

**Explanation:** This is a DB2 internal error. The Buffer Manager (BM) subcomponent of DB2 has discovered that the BM invoker is attempting to release the page which does not belong to the work file database.

This abend reason code is issued by the following CSECT: DSNB1REL

**System Action:** The requesting execution unit is abnormally terminated.

**Operator Response:** Notify the system programmer, and print the SYS1.LOGREC and the SVC dump.

**System Programmer Response:** Refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 5.

---

**00C200BD**

**Explanation:** This is a DB2 internal error. The caller of the buffer manager (BM) is still holding a page latch on the page which is currently being released by the application.

This abend reason code is issued by the following CSECT: DSNB1REL

**System Action:** The requesting application process is abended.

**Operator Response:** Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

**System Programmer Response:** Refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2, 5.

---

**00C200BE**

**Explanation:** This is a DB2 internal error. The buffer manager (BM) is trying to dequeue a page latch waiter from the wait queue, but there are no waiters.

This abend reason code is issued by the following CSECTs: DSNB1CLT DSNB1ULT

**System Action:** The requesting application process is abended.

**Operator Response:** Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

**System Programmer Response:** Refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2, 5.

---

**00C200C0**

**Explanation:** DB2 is unable to perform I/O processing for the requesting function. An error code (other than a permanent I/O error) was returned by the media manager during the I/O backend processing.

**System Action:** The requesting execution unit is abended.

**Operator Response:** Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** The unexpected media manager reason code is saved in register 8. It might help determine the cause of the failure.

Check the MVS console log for an IOS error message indicating the type of I/O error that occurred. If an IOS message was issued, follow the problem determination directions for that message.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2, 5, 10, 12.

This abend reason code is issued by the following CSECTs: DSNB5COM DSNB5FOR DSNB5RAP DSNB5PCO

---

**00C200C1**

**Explanation:** The page version number in the database page header is outside the valid range of values. This can be caused by one of the following:

- Copying data sets improperly from another DB2 subsystem.
- In a CREATE TABLESPACE statement, specifying a VCAT catalog name that is the same as the name of an object in another DB2 subsystem on the same processor.
- Conditionally starting DB2 to a prior time with an invalid RBA range.
- Incorrect use of the REPAIR utility (modifying the page RBA).
- The page was damaged by a DB2 system error.
This abend reason code is issued by the following CSECT:

System Action: The requesting execution unit is abended. If DSNB1SW issues the ABEND, then it is preceded by a DSN1500I message indicating which page is in error and a DSN10041 message indicating the page set is put in STOPE mode.

Operator Response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

User Response: One of the following:

- If the data set was copied from another DB2 subsystem, run DSN1COPY with the RESET option to set the log RBAs in each page to 0.
- If a table space was created with the wrong VCAT catalog name, drop the object and create it again.
- If DB2 was conditionally started with an invalid RBA range, correct the RBA range and restart DB2 with conditions again.
- If the page was damaged by the REPAIR utility, restore it with the RECOVER utility using the PAGE option.
- If you are running data sharing, check the connectivity of the systems to the sysplex timers. The TOD clock values of all systems in the sysplex should all be within one microsecond. TOD clock values will not drift more than one microsecond apart unless a sysplex timer is malfunctioning.
- Otherwise, inform your system programmer that you suspect an error.

Problem Determination: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

The following general purpose registers (GPRs) contain the indicated diagnostic information:

<table>
<thead>
<tr>
<th>GPR</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Address of the page buffer</td>
</tr>
<tr>
<td>8</td>
<td>Address of the page set block (PB)</td>
</tr>
</tbody>
</table>

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 2, 5, 13, 33.

This abend reason code is issued by the following CSECT: DSNB1SW.

00C200C2

Explanation: This is a DB2 internal error. The buffer manager (BM) subcomponent of DB2 has discovered that the BM invoker is attempting to decrease the page's write intent count (WIC), but the invoker has no write intent request outstanding.

This abend reason code is issued by the following CSECT: DSNB1RWI

System Action: The BM does not decrease the page's WIC as requested, and the execution unit driving this function is abended. An SVC dump is requested and the abend status is recorded in the SYS1.LOGREC.

Operator Response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

System Programmer Response: Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 2, 5, 13, 19, 33.

00C200C3

Explanation: This is a DB2 internal error. The buffer manager (BM) subcomponent of DB2 discovered that the BM invoker is attempting to set the page's write intent count (WIC), but the invoker has no read intent request outstanding.

This abend reason code is issued by the following CSECT: DSNB1SW

System Action: The BM does not increase the page's WIC as requested, and the execution unit driving this function is abended. An SVC dump is requested and the abend status is recorded in the SYS1.LOGREC.

Operator Response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

System Programmer Response: Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 2, 5, 19, 33.

00C200C5

Explanation: This is a DB2 internal error. The buffer manager (BM) subcomponent of DB2 discovered that its invoker was attempting to decrease the write dependency count (WDC) for a buffer. However, the buffer contains database updates that have not yet been written back to DASD. The buffer manager makes the buffer available for reassignment.

This abend reason code is issued by the following CSECTs: DSNB1REL DSNB1RWI

System Action: The buffer manager does not decrease the WDC as requested, and the execution unit driving this function proceeds normally. An SVC dump is requested and the abend status is recorded in SYS1.LOGREC.

Operator Response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

System Programmer Response: Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 2, 5, 13, 19, 33.

00C200C6

Explanation: This is a DB2 internal error. The buffer manager (BM) subcomponent of DB2 has discovered that the BM invoker is attempting to release a page that was not held by the invoker or the page has an unbalanced write intent (for example, reset write intent has not yet been issued prior to releasing the page).

This abend reason code is issued by the following CSECTs: DSNB1REL DSNB1RWI

System Action: The BM does not release the page as requested, and the execution unit driving this function termi-
nates abnormally. An SVC dump is requested and the abend status is recorded in the SYS1.LOGREC.

**Operator Response:** Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

**System Programmer Response:** Refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** Collect the following diagnostic items listed in [Appendix B, “Problem determination” on page 1051](#): 1, 2, 5, 13, 19, 33.

---

**00C200C7**

**Explanation:** An error code, other than timeout, insufficient storage, or MVS system error, was returned by the IRLM LOCK request. The IRLM LOCK request was invoked to acquire an open lock to perform a physical open or close.

This abend reason code is issued by the following CSECT: DSNB1LC

**System Action:** The requesting execution unit is abended.

**User Response:** Rerun the application.

**Operator Response:** Print the SYS1.LOGREC and request the SVC dump.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** The unexpected IRLM reason code is saved in register 8. It may help determine the cause of the error.

Collect the following diagnostic items listed in [Appendix B, “Problem determination” on page 1051](#): 1, 2, 5.

---

**00C200C8**

**Explanation:** A return code greater than 4 was returned by the IRLM UNLOCK request invoked to release a open lock after completing a physical open or close.

This abend reason code is issued by the following CSECT: DSNB1ULK

**System Action:** The requesting execution unit is abended.

**User Response:** Rerun the application.

**Operator Response:** Print the SYS1.LOGREC and request the SVC dump.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** The unexpected IRLM reason code is saved in register 8. It may help determine the cause of the error.

Collect the following diagnostic items listed in [Appendix B, “Problem determination” on page 1051](#): 1, 2, 5.

---

**00C200CC**

**Explanation:** The buffer manager (BM) subcomponent of DB2 discovered a damaged ABG or AB control block while attempting to write a checkpoint.

This abend reason code is issued by the following CSECT: DSNB1CHK

**System Action:** DB2 is abnormally terminated; if processing were to continue, an invalid checkpoint would be created which would damage data on a subsequent DB2 restart.

**Operator Response:** Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump. Restart DB2.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** Collect the following diagnostic items listed in [Appendix B, “Problem determination” on page 1051](#): 1, 5.

---

**00C200CF**

**Explanation:** The buffer manager (BM) subcomponent of DB2 discovered a damaged PBG control block while attempting to write a checkpoint.

This abend reason code is issued by the following CSECT: DSNB1CHK

**System Action:** DB2 is abended.

**Operator Response:** Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

**System Programmer Response:** Refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** Collect the following diagnostic items listed in [Appendix B, “Problem determination” on page 1051](#): 1, 2, 5, 13, 19, 33.

---

**00C200CB**

**Explanation:** An error code, other than timeout, insufficient storage, or MVS system error, was returned by the IRLM LOCK request. The IRLM LOCK request was invoked to acquire an open lock to perform a physical open or close.

This abend reason code is issued by the following CSECT: DSNB1LC

**System Action:** The requesting execution unit is abended.

**User Response:** Rerun the application.

**Operator Response:** Print the SYS1.LOGREC and request the SVC dump.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** Collect the following diagnostic items listed in [Appendix B, “Problem determination” on page 1051](#): 1, 2, 5, 13, 19, 33.

---

**00C200CC**

**Explanation:** The buffer manager (BM) subcomponent of DB2 discovered a damaged PBG control block while attempting to write a checkpoint.

This abend reason code is issued by the following CSECT: DSNB1LC

**System Action:** An SVC dump is produced and checkpointing continues.

**Operator Response:** Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** Collect the following diagnostic items listed in [Appendix B, “Problem determination” on page 1051](#): 1, 2, 5, 13, 19, 33.
00C200CD

**Explanation:** This usually indicates a problem internal to DB2. However, the problem can result from errors in other products. An unexpected reason code was returned by the Asynchronous Data Mover Facility when it was called to move a set of pages between the virtual buffer pool and the hiperpool.

This abend reason code is issued by the following CSECT: DSNB1GH

**System Action:** The page-move operation is terminated. An SVC dump is requested and the abend status is recorded in SYS1.LOGREC.

**Operator Response:** Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The unexpected Asynchronous Data Mover Facility reason code is saved in register 8. It might help determine the cause of the error.

Collect the following diagnostic items listed in Appendix B on page 1051: 1, 2, 5.

00C200CF

**Explanation:** DB2 could not acquire enough virtual storage for allocating private buffers for an internal castout process. The castout operation is queued until an existing castout process becomes available.

**System Action:** The requesting execution unit is abended. No dump is produced.

**Problem Determination:** This abend reason code is issued by the following CSECT: DSNB5PCO

00C200D0

**Explanation:** The buffer manager (BM) subcomponent of DB2 is unable to perform I/O processing for the requesting function. A prior abend has occurred in the buffer manager (BM) I/O termination exit routine. Retry of the prior abend is not allowed by MVS.

This abend reason code is issued by the following CSECT: DSNB5UTX

**System Action:** DB2 is abended.

**Operator Response:** Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump. Restart DB2.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The functional recovery routine (FRR) parameter list was recorded in the SDWA variable recording area (VRA) when the original abend occurred. Examine the VRA to determine whether the media manager request block (MMRB) is properly passed by the media manager.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B on page 1051: 1, 2, 5.

00C200D1

**Explanation:** The buffer manager (BM) subcomponent of DB2 is unable to perform I/O processing for the requesting function. A prior abend has occurred in the buffer manager I/O termination exit routine. An attempt to retry and to continue main line processing (after completion of processing of this prior abend) resulted in recursion to the I/O termination exit routine’s functional recovery routine (FRR).

This abend reason code is issued by the following CSECT: DSNB5UTX

**System Action:** DB2 is abended.

**Operator Response:** Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump. Restart DB2.

**Problem Determination:** The FRR parameter list was recorded in the SDWA variable recording area (VRA) when the original abend occurred. Examine the VRA to determine whether the media manager request block (MMRB) is properly passed by the media manager.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B on page 1051: 1, 2, 5.

00C200D2

**Explanation:** The buffer manager (BM) subcomponent of DB2 is unable to perform I/O processing for the requesting function. A prior abend has occurred in the buffer manager I/O error exit routine during processing of a database I/O error.

This abend reason code is issued by the following CSECT: DSNB5UEX

**System Action:** DB2 is abended.

**Operator Response:** Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump. Restart DB2.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The functional recovery routine (FRR) parameter list was recorded in the SDWA variable recording area (VRA) when the original abend occurred. Examine the VRA to determine whether the media manager request block (MMRB) is properly passed by the media manager. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B on page 1051: 1, 2, 5.

00C200D3

**Explanation:** A prior abend occurred in a ‘must complete’ processing window of a buffer manager (BM) function.

This abend reason code is issued by the following CSECT: DSNB1RRR

**System Action:** DB2 is abended.

**Operator Response:** Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump. Restart DB2.
**System Programmer Response:** If you suspect an error in
DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference
for information on identifying and reporting the problem.

**Problem Determination:** See the Problem Determination
section of the original abend code.

Collect the following diagnostic items listed in Appendix B,
“Problem determination” on page 1051.

---

**00C200D4**

**Explanation:** A prior abend occurred in an I/O processing
window of a buffer manager (BM) function. I/O functional
recovery cannot be reliably performed because the tracking
data required to do so is incomplete. The required data is
probably missing because the functional recovery routine
(FRR) that is protecting the abending I/O processing function
was bypassed by MVS.

This abend reason code is issued by the following CSECT:
DSNB1RRR

**System Action:** DB2 is abended.

**Operator Response:** Notify the system programmer, and
print the SYS1.LOGREC and the SVC dump. Restart DB2.

**System Programmer Response:** If you suspect an error in
DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference
for information on identifying and reporting the problem.

**Problem Determination:** See the Problem Determination
section of the original abend code.

Collect the following diagnostic items listed in Appendix B,
“Problem determination” on page 1051.

---

**00C200D5**

**Explanation:** An abend occurred in the I/O termination exit
routine while resuming a suspended execution unit. The status of resume was ‘indoubt’ at the time of the abend.

This abend reason code is issued by the following CSECT:
DSNB5UTX

**System Action:** DB2 is abended.

**Operator Response:** Notify the system programmer, print the
SYS1.LOGREC, and request the SVC dump. Restart DB2.

**System Programmer Response:** If you suspect an error in
DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference
for information on identifying and reporting the problem.

**Problem Determination:** The functional recovery routine
(FRR) parameter list was recorded in the SDWA variable
recording area (VRA) when the original abend occurred.
Examine the VRA to determine whether the media manager
request block (MMRB) is properly passed by the media
manager. If you suspect an error in DB2, refer to Section 3 of
DB2 Diagnosis Guide and Reference for information on identi-
yfying and reporting the problem.

Collect the following diagnostic items listed in Appendix B,
“Problem determination” on page 1051.

---

**00C200D6**

**Explanation:** An abend occurred in the I/O termination exit
routine while resuming the suspended execution unit. The status of resume was ‘indoubt’ at the time of the abend.

This abend reason code is issued by the following CSECT:
DSNB5UTX

**System Action:** DB2 is abended.

**Operator Response:** Notify the system programmer, print the
SYS1.LOGREC, and request the SVC dump. Restart DB2.

**System Programmer Response:** If you suspect an error in
DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference
for information on identifying and reporting the problem.

**Problem Determination:** The functional recovery routine
(FRR) parameter list is recorded in the SDWA variable
recording area (VRA) when the original abend occurred.
Examine the VRA to determine whether the media manager
request block (MMRB) is properly passed by the media
manager. If you suspect an error in DB2, refer to Section 3 of
DB2 Diagnosis Guide and Reference for information on identi-
yfying and reporting the problem.

Collect the following diagnostic items listed in Appendix B,
“Problem determination” on page 1051.

---

**00C200D7**

**Explanation:** A prior abend occurred while resuming a sus-
pended execution unit. The status of resume was ‘indoubt’ at the time of the abend.

This abend reason code is issued by the following CSECT:
DSNB1RRR

**System Action:** DB2 is abended.

**Operator Response:** Notify the system programmer, print the
SYS1.LOGREC, and request the SVC dump. Restart DB2.

**System Programmer Response:** If you suspect an error in
DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference
for information on identifying and reporting the problem.

**Problem Determination:** See the Problem Determination
section of the original abend code.

Collect the following diagnostic items listed in Appendix B,
“Problem determination” on page 1051.

---

**00C200D8**

**Explanation:** This is a DB2 internal error. The buffer
manager (BM) subcomponent of DB2 discovered that some
buffer manager resources are inconsistent.

This abend reason code is issued by the following CSECTs:
DSNB5COM DSNB1CMS

**System Action:** DB2 is abended.

**Operator Response:** Notify the system programmer, print the
SYS1.LOGREC, and request the SVC dump. Restart DB2.

**System Programmer Response:** Refer to Section 3 of DB2
Diagnosis Guide and Reference for information on identifying and
reporting the problem.

**Problem Determination:** Collect the following diagnostic
items listed in Appendix B, “Problem determination” on
page 1051.
**00C200E0**

**Explanation:** A table space or index space cannot be accessed because DB2 is unable to create the referenced virtual buffer pool. The referenced virtual buffer pool size was zero, which indicates to DB2 that this buffer pool should not be activated. DB2 message DSNB602I was issued to inform the operator of the error. This reason code and the table space or index space name are recorded in the cursor table (CT) and made available to the user in the SQLCA.

This abend reason code is issued by the following CSECTs: DSNB1OPP DSNB1OPS

**System Action:** An SQLCODE -904 (resource not available) is returned to the user. The SVC dump and the SYS1.LOGREC recording are not requested.

**System Programmer Response:** Analyze the virtual storage content of the ssmnDBM1 address space to determine further action. If appropriate, use the ALTER TABLESPACE or ALTER INDEX statement to modify the affected table space or index to indicate a usable buffer pool. To determine a usable buffer pool, use the DISPLAY BUFFERPOOL command. If necessary, use the ALTER BUFFERPOOL command to activate the failing buffer pool by setting its VPSIZE to a nonzero value.

**00C200E1**

**Explanation:** The buffer manager (BM) subcomponent of DB2 is unable to open a data set that is required to be accessed by the requesting function. An error was returned by the media manager CONNECT function, which was invoked to open a VSAM data set. DB2 message DSNB204I was issued to inform the operator of the error condition. This reason code and the data set name are recorded in the cursor table (CT) and made available to the user in the SQLCA or in messages.

This abend reason code is issued by the following CSECT: DSNB1OST

**System Action:** A 'resource not available' code is returned to the user. Abend status is recorded in SYS1.LOGREC.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Refer to system message IEC161I and DB2 message DSNB204I for assistance in determining the cause of the error. Correct the situation, and notify the user to invoke the application again.

**Problem Determination:** The unexpected media manager return code is saved in register 8. It may help determine the cause of the failure.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051.

**00C200E6**

**Explanation:** The buffer manager (BM) subcomponent of DB2 is unable to perform the I/O operation on a data set that is required by the requesting function. A logical I/O error was detected by the buffer manager I/O functions. The logical I/O error indicates that a requested page (read operation) resides within the error page range of the data set. This reason code and the data set name are recorded in the cursor table (CT) and made available to the user in the SQLCA or in messages.

This abend reason code is issued by the following CSECT: DSNB1GET

**System Action:** A 'resource not available' code is returned to the user.

**User Response:** Notify the system programmer. Invoke the application after the system programmer has corrected the error.

**System Programmer Response:** The error page range can be located from the console sheet or through the -DISPLAY DB command. Correct the error pages with the recovery utility, and notify the user to invoke the application again. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051.

**00C200E2**

**Explanation:** The buffer manager (BM) subcomponent of DB2 is unable to open a data set that is required by the requesting function. An error was returned by the dynamic allocation function that was invoked to allocate a VSAM data set. DB2 message DSNB207I was issued to inform the operator of the error condition. This reason code and the data set name are recorded in the cursor table (CT) and made available to the user in the SQLCA or in messages.

This abend reason code is issued by the following CSECT: DSNB1OST

**System Action:** A 'resource not available' code is returned to the user. Abend status is recorded in SYS1.LOGREC.

**User Response:** Notify the system programmer. Invoke the application after the system programmer has corrected the error.

**System Programmer Response:** The error code returned from the dynamic allocation function was externalized in the DSNB207I message. Refer to the appropriate MVS publication for an explanation of this error code. Correct the situation, and notify the user to invoke the application again.

**Problem Determination:** The unexpected dynamic allocation return code is saved in register 8. It may help determine the cause of the failure.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051.

**00C200E5**

**Explanation:** The buffer manager (BM) subcomponent of DB2 is unable to perform the I/O operation on a data set that is required by the requesting function. A permanent I/O error was returned by the buffer manager I/O functions. Correct the error pages with the recovery utility, and notify the user to invoke the application again after the system programmer has corrected the error.

**System Programmer Response:** Use the -DISPLAY DB command to obtain the error page range. Notify the system programmer.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051.
**System Programmer Response:** Recover the entire data set with the recovery utility, and notify the user to invoke the application again. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

Check the MVS console log for an IOS error message indicating the type of I/O error that occurred. If an IOS message was issued, follow the problem determination directions for that message.

---

00C200E8

**Explanation:** The virtual buffer pool (indicated in the SQLCA) cannot be created because of insufficient virtual storage. Message DSNB603I or DSNB605I was issued to inform the operator of the error. This reason code and the buffer pool ID are recorded in the cursor table (CT) and made available to the user in the SQLCA or in messages.

This abend reason code is issued by the following CSECTs: DSNB1BVP DSNB1CHS

**System Action:** An SQLCODE -904 (resource not available) is returned to the user. The SVC dump and the SYS1.LOGREC recording are not requested.

**Operator Response:** Notify the system programmer.

---

00C200E9

**Explanation:** A buffer could not be assigned in the virtual buffer pool (indicated in the SQLCA) because all buffers in the virtual buffer pool are in a nondisplaceable state. (Buffers are in a nondisplaceable state when they contain actively referenced pages or updated pages for which writes are pending.) Message DSNB601I was issued to inform the operator of the error. This reason code and the buffer pool ID are recorded in the cursor table (CT) and made available to the user in the SQLCA or in messages.

This abend reason code is issued by the following CSECTs: DSNB1GW B DSNB1MOC DSNB1WKF DSNB1WKF

**System Action:** An SQLCODE -904 (resource not available) is returned to the user. The SVC dump and the SYS1.LOGREC recording are not requested.

**Operator Response:** Notify the system programmer.

---

00C200EC

**Explanation:** A member of a DB2 data sharing group was unable to perform a global drain request on an object (a table space, an index space, or a partition) because the object was held by other claimers and the drain request timed out waiting for the claim count to reach zero.

**System Action:** If the problem was encountered by DB2 when trying to automatically recover a group buffer pool recovery pending (GRECP) object following the failure of a group buffer pool (GBP), then DB2 issues message DSNB350I or DSNB351I to the console with this reason code indicating that the object cannot be automatically recovered.

Otherwise, a ‘resource not available’ return and reason code are sent back to the requesting function. DB2 message DSNT500I may be sent to the console. The reason code and the object name are recorded in the cursor table (CT) and made available to the user in the SQLCA or in the message.

**System Programmer Response:** Take one of these actions:

- Reevaluate the utility timeout factor on installation panel DSNTIPI and increase it, if necessary.
- Find the threads holding the object through the -DISPLAY DB CLAIMS command on the object. Either terminate those threads or wait until no one holds the object. Then invoke the application again.

If DSNB350I or DSNB351I messages were issued, then after you take one of the actions above, recover the GRECP objects as indicated in the “System Programmer Response” for DSNB350I or DSNB351I.

---

00C200EC

**Explanation:** A data sharing group member is not able to perform a global drain request on an object (a table space, an index space, or a partition). One or more peer members in the group hold retained locks on the object. Message DSNT501I is sent to the console to report the condition.

**System Action:** A ‘resource not available’ return code, reason code, and object name are sent back to the requesting function.

**System Programmer Response:** Use the DISPLAY DATABASE command with the LOCKS option to display the member names owning the retained locks. You must restart those sub-systems to remove the ‘resource unavailable’ condition.

**Problem Determination:** This reason code is issued by the following CSECT: DSNB1DRA

---
**Problem Determination:** This reason code is issued by the following CSECT: DSNB1DRA

---

### 00C200ED

**Explanation:** DB2, in a data sharing environment, detected that the requested use of a type 1 index with a SUBPAGES value greater than 1 would have caused the index to become group buffer pool dependent. DB2 does not allow type 1 indexes with a SUBPAGES value greater than 1 to become group buffer pool dependent.

**System Action:** The use of the index is not allowed.

**User Response:** If the index is to be used in group buffer pool dependent mode, then either the index should be converted to a type 2 index or it should be converted to a type 1 index with SUBPAGES 1.

---

### 00C200EE

**Explanation:** A VTYPE(DATASPACE) buffer could not be accessed for a virtual buffer pool (indicated in the SQLCA) because DB2 did not have sufficient internal ssnmDBM1 address space working storage to access the buffer.

**System Action:** An SQLCODE -904 (resource not available) is returned to the user. The SVC dump and the SYS1.LOGREC recording are requested. This reason code and the buffer pool ID are made available to the user in the SQLCA.

**User Response:** Notify the system programmer.

**System Programmer Response:** Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

- Reduce concurrent activity by reducing the number of DB2 threads, or, if other VTYPE(PRIMARY) virtual buffer pools exist, convert these to VTYPE(DATASPACE) to free up ssnmDBM1 address space storage.

**Problem Determination:** refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

---

### 00C200EF

**Explanation:** DB2 is unable to open a necessary data set. The data set attributes stored in the DB2 catalog are not supported by the version of DFSMS that is currently running.

**System Action:** A ‘resource not available’ code is returned to the user. The SVC dump and the SYS1.LOGREC recording are requested.

**User Response:** Notify the system programmer.

**System Programmer Response:** Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

- This reason code and the data set name are recorded in the cursor table (CT) and made available to the user in the SQLCA or in messages.

---

### 00C200F2

**Explanation:** The buffer manager (BM) subcomponent of DB2 is unable to unallocate a DB2 data set. An error was returned by the media manager DISCONNECT function that was invoked to unallocate a data set. This reason code and the data set name are recorded in the cursor table (CT) and in the SQLCA.

**System Action:** A ‘resource not available’ code is returned to the user. The SVC dump and the SYS1.LOGREC recording are requested.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The unexpected dynamic unallocation reason code is saved in register 8. It may help determine the cause of the failure. Refer to the appropriate MVS publication for an explanation of the error code.

Collect the following diagnostic items listed in Appendix B.

---

**Problem determination on page 1051:** 1, 2, 5, 10, 12.

---

### 00C200F2

**Explanation:** The buffer manager (BM) subcomponent of DB2 is unable to close a DB2 data set. An error was returned by the media manager DISCONNECT function that was invoked to close a data set. This reason code and the data set name are recorded in the cursor table (CT) and in the SQLCA or in messages.

**System Action:** A ‘resource not available’ code is returned to the user. The SVC dump and the SYS1.LOGREC recording are requested.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The unexpected media manager disconnect reason code is saved in register 8 and may help determine the cause of the failure. Locate the corresponding IEC161I message in the operator console sheet, and refer to the appropriate MVS publication for assistance in determining the cause of the error.

Collect the following diagnostic items listed in Appendix B.

**Problem determination on page 1051:** 1, 2, 5, 10, 12.
00C200F3

**Explanation:** DB2 is unable to obtain one of the following locks:

- SYSLGRNG or SYSLGRNX
- Group buffer pool dependent conversion lock on a page set or partition
- Group buffer pool start or stop lock
- ALTER BUFFERPOOL lock

The IRLM LOCK request detected a timeout error.

**System Action:** A 'resource not available' code is returned to the user. This reason code and the data set name are recorded in the cursor table (CT) and made available to the user in the SQLCA or messages.

**User Response:** Resubmit the failing application.

**Problem Determination:** This abend reason code is issued by the following CSECTs: DSNB1SCR, DSNB1DLK.

---

00C200F4

**Explanation:** DB2 is unable to obtain one of the following locks:

- SYSLGRNG or SYSLGRNX
- Group buffer pool dependent conversion lock on a page set or partition
- Group buffer pool start or stop lock
- ALTER BUFFERPOOL lock

The IRLM LOCK request detected an out-of-storage condition.

**System Action:** A 'resource not available' code is returned to the user. This reason code is recorded in the cursor table (CT) and is available to the user in the SQLCA or messages.

**User Response:** Resubmit the failing application.

**Problem Determination:** This abend reason code is issued by the following CSECTs: DSNB1SCR, DSNB1DLK.

---

00C200F6

**Explanation:** The buffer manager (BM) subcomponent of DB2 is unable to open a data set that is required to be accessed by the requesting function. The data set has been migrated by DFHSM and the data set must be recalled before being accessed. Since the RECALL(yes) option was selected by the installation, a recall for the migrated data set has been initiated. A recall was not complete after the amount of time specified in the RECALL option had elapsed.

This reason code and the data set name are recorded in the cursor table (CT) and made available to the user in the SQLCA or messages. The data set name and the reason code indicated are the last migrated data set requested. Other migrated data sets within the table space may exist. For each one that exists, a DSNT500I message containing the data set name and reason code has been sent to the console.

This abend reason code is issued by the following CSECT: DSNB1RST

**System Action:** A 'resource not available' code is returned to the user. A DSNT500I message is sent to the console.

**User Response:** After the data set has been restored, rerun the application program, transaction, or query. If necessary, contact the operator to find out the status of the migrated data set.

---

00C200F7

**Explanation:** The page found in the buffer is not the page requested by the buffer manager. The buffer manager detected the error by comparing the page number of the page returned with the requested page number. This error may be caused by one of the following:

- Either the VTOC or VVDS is damaged, causing multiple data sets to occupy the same extents on DASD.
- The page was altered incorrectly by a non-DB2 facility or a DB2 service aid.
- An internal DB2 error damaged the page. The recovery log will be required for problem determination.

This abend reason code is issued by the following CSECT: DSNB1GET

**System Action:** The requesting execution unit is abended.

**Operator Response:** Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** The following general purpose registers (GPRs) contain the indicated diagnostic information:

<table>
<thead>
<tr>
<th>GPR</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Address of the page buffer</td>
</tr>
<tr>
<td>8</td>
<td>Address of the page set block (PB)</td>
</tr>
</tbody>
</table>

Collect the following diagnostic items listed in Appendix B, on page 1051: 1, 10, 12, 28, 29, 30.

---

00C200F8

**Explanation:** The buffer manager (BM) subcomponent of DB2 is unable to perform the I/O operation on a data set. A physical I/O error was detected by the buffer manager I/O functions.

This reason code and the data set name are recorded in the cursor table (CT) and made available to the user in the SQLCA or messages.

This abend reason code is issued by the following CSECTs: DSNB1GET DSNB5COM

**System Action:** A 'resource not available' code is returned to the user. A DSNB224I message is issued, unless it has already been issued 10 times for the data set.

If the I/O is a write operation, or if the I/O is a read operation performed during restart or rollback, then the error page range of the data set is updated. A DSNU086E message is issued indicating the data set name and its corresponding I/O error page range, unless it has already been issued 10 times for the data set.

**User Response:** Notify the system programmer. Invoke the application after the system programmer has corrected the error.

**Operator Response:** Use the -DISPLAY DB command to obtain the error page range. Notify the system programmer.

**System Programmer Response:** The error page range can be located from the console sheet or with the -DISPLAY DB
command. Correct the error pages with the recovery utility, and notify the user to invoke the application again. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 10, 12.

Check the MVS console log for an IOS error message indicating the type of I/O error that occurred. If an IOS message was issued, follow the problem determination directions for that message.

**00C200F9**

**Explanation:** DB2 is unable to open a data set that the requesting function must access. The data set was migrated by HSM and must be recalled before being accessed. DB2's attempt to initiate a recall of the migrated data set was unsuccessful.

This reason code and the data set name are recorded in the cursor table (CT) and made available to the user in the SQLCA or in messages. The data set name and the reason code indicated are the last requested migrated data set. Other migrated data sets might exist. For each existing data set, message DSNNT500I containing the data set name and reason code was sent to the console.

**System Action:** A ‘resource not available’ code is returned to the user. A DSNNT500I message is sent to the console.

**User Response:** Issue the HSM command (HRECALL) to restore the migrated data set. Rerun your application program, transaction, or query after the data set is restored.

**Problem Determination:** This abend reason code is issued by the following CSECT: DSNB1OST

**00C200FA**

**Explanation:** The buffer manager (BM) subcomponent of DB2 is unable to obtain an open lock to perform a physical open or close of a page set. A timeout error was detected by the IRLM LOCK request. The reason code and the database and page set names are recorded in the cursor table (CT). They are made available to the user in the SQLCA or in messages.

This abend reason code is issued by the following CSECT: DSNB1LCK

**System Action:** A ‘resource not available’ code is returned to the user.

**User Response:** Resubmit the failing application.

**00C200FB**

**Explanation:** The buffer manager (BM) subcomponent of DB2 is unable to obtain an open lock to perform a physical open or close of a page set. An out-of-storage condition was detected by the IRLM LOCK request. The reason code and the database and page set names are recorded in the cursor table (CT). They are available to the user in the SQLCA or in messages.

This abend reason code is issued by the following CSECT: DSNB1LCK

**System Action:** A ‘resource not available’ code is returned to the user.

**00C200FC**

**Explanation:** The buffer manager (BM) subcomponent of DB2 is unable to obtain an open lock to perform a physical open or close of a page set. A system error was detected by the IRLM LOCK request. The reason code and the database and page set names are recorded in the cursor table (CT). They are made available to the user in the SQLCA or in messages.

This abend reason code is issued by the following CSECT: DSNB1LCK

**System Action:** A ‘resource not available’ code is returned to the user.

**User Response:** Resubmit the failing application.

**00C200FD**

**Explanation:** The buffer manager is unable to perform the I/O operation on a data set due to an error on page’s parity flag detected by the buffer manager’s I/O function.

This abend reason code is issued by the following CSECT: DSNB1GET

**System Action:** A ‘resource not available’ return code is returned to the user. The related reason code 00C200FD, the page number, the page set name, and the data base name in question are recorded in the cursor table (CT) and made available to the user in the SQLCA.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** The error page can be found via SQLCA. Correct the error pages with the recovery utility, and notify the user to invoke the application again.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for failure for information on identifying and reporting the problem.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 10, 12.

**00C200FE**

**Explanation:** DB2 is unable to open a data set that the requesting function must access. The data set was migrated by DFHSM and must be recalled before being accessed. Since the RECALL(no) option was selected by the installation, recall for the migrated data set was not initiated.

This reason code and the data set name are recorded in the cursor table (CT) and made available to the user in the SQLCA or in messages. The data set name and the reason code indicated are the last migrated data set requested. Other migrated data sets within the table space might exist. For each existing data set, message DSNNT500I containing the data set name and reason code has been sent to the console.

**System Action:** A ‘resource not available’ code is returned to the user. A DSNNT500I message is sent to the console.

**User Response:** Notify the system programmer. After the data set is restored, rerun the application program, transaction, or query.

**System Programmer Response:** Issue the DFHSM command (HRECALL) to restore the migrated data set.
Problem Determination: This abend reason code is issued by the following CSECT: DSNB1OST

00C200FF
Explanation: An attempted open of a page set failed because DB2 has reached the MVS limit on concurrent open data sets.
This reason code is issued by the following CSECT: DSNB1OST
System Action: A "resource not available" (SQLCODE -904) is returned to the user and the requested open is not performed. This reason code and the data set name are recorded in the cursor table (CT) and made available to the user in the SQLCA. A DSNB207I message is displayed on the operator console. The SVC dump and the SYS1.LOGREC recording are not requested.
Operator Response: Notify the system programmer.
System Programmer Response: Reduce the number of page sets that must be kept open by DB2 by limiting the amount of concurrent activity.
Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

00C20101
Explanation: The sharing attribute is inconsistent between the header page of a data set and the DBD. This reason code and the data set name are made available to the user in the SQLCA or in messages.
This reason code is issued by the following CSECT: DSNB1OPP
System Action: A "resource not available" code is returned to the user.
User Response: Notify the system programmer.
System Programmer Response: First determine whether the database is shared, and whether it is owned by this system. This can be achieved by issuing a SELECT on the SYSIBM.SYSDATABASE catalog table, where the database name is the database you are checking, and by examining the ROSHARE column.
If the DB2 catalog indicates that it is a ROSHARE OWNER database, the problem can be corrected by the REPAIR utility or the -STOP DATABASE command. The -STOP DATABASE command will reformat the header page and make it consistent with the DBD.
If the database is ROSHARE READ on this system, then check the definition of the database on the owning system. If, on the owning system, the database is no longer defined as ROSHARE OWNER, then the table space or index should be dropped on the system on which the error was detected, since the database has been altered to nonshared by the owning system. However, if the database is defined as ROSHARE OWNER on the owning system, then issue a -STOP DATABASE with the SPACENAM parameter from the owning system, which will make the header page consistent with the owner's DBD, and force this change to DASD, making it available to other systems.
If it is a nonshared database, then the sharing attribute can only be corrected via the REPAIR utility.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

00C20102
Explanation: A read-only system attempted to access an inconsistent data set. This reason code and the data set name are made available to the user in the SQLCA or in messages.
This reason code is issued by the following CSECT: DSNB1OPP
System Action: A "resource not available" code is returned to the user.
User Response: Notify the system programmer.
System Programmer Response: On the system in which the database is defined as ROSHARE OWNER, perform the following tasks:
• Use the -DISPLAY DATABASE command to insure there is no exceptional state for this table space or index.
• Issue the -STOP DATABASE command with the SPACENAM parameter to stop this table space or index.
Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

00C20103
Explanation: DB2 is unable to access a data set because its system page is inaccessible. This reason code and the data set name are available to the user in the SQLCA or in messages.
This reason code is issued by the following CSECT: DSNB1OPP
System Action: A "resource not available" code is returned to the user.
User Response: Notify the system programmer.
System Programmer Response: Determine why the system page is inaccessible by examining any error messages that appeared on the console at the time of the error, or by issuing a -DISPLAY DATABASE command. Take the appropriate action to correct the situation.
Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

00C20104
Explanation: DB2 is unable to access a shared data set because it was down leveled by a DSN1COPY job, or a REPAIR utility with REPLACE RESET specified. This reason code and the data set name are made available to the user in the SQLCA or in messages.
This reason code is issued by the following CSECT: DSNB1OPP
System Action: A "resource not available" code is returned to the user.
User Response: Notify the system programmer.
System Programmer Response: On the system in which the database is defined as ROSHARE OWNER, perform the following tasks:
• Use the -DISPLAY DATABASE command to insure there is no exceptional state for this table space or index.
• Issue the -STOP DATABASE command with the SPACENAM parameter to stop this table space or index.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1.

---

**00C20105**

**Explanation:** The page set creation timestamp is inconsistent between the header page and the DBD. This reason code and the data set name are made available to the user in the SQLCA or in messages.

This reason code is issued by the following CSECT: DSNB1OPP

**System Action:** A “resource not available” is returned to the user.

**User Response:** Notify the system programmer.

**System Programmer Response:** First determine whether the database is shared, and whether it is owned by this system. This can be achieved by issuing a SELECT on the SYSIBM.SYSDATABASE catalog table, where the database name is the database you are checking, and examining the ROSHARE column.

For a data set in a ROSHARE OWNER database, if the failure occurs on a CREATE TABLESPACE or CREATE INDEX, the timestamp mismatch indicates that the table space or index was previously dropped, but DB2 was unable to delete the data set. In this case, the data set must be deleted using AMS DELETE CLUSTER before the CREATE can take place.

For a data set in a ROSHARE OWNER database at any time other than CREATE TABLESPACE or CREATE INDEX, the inconsistent timestamp can be corrected by first stopping the table space or index via the -STOP DATABASE command with the SPACENAM parameter, and then issuing the -START DATABASE command to start it. The -STOP DATABASE command will reformat the header page using the information retrieved from the DBD.

For a data set in a ROSHARE READ database, a timestamp mismatch indicates that the table space or index has been dropped and re-created on the owning system, and must also be dropped and re-created on this system.

For a data set in a nonshared database, the timestamp value in the header page can only be corrected via the REPAIR utility.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1.

---

**00C20106**

**Explanation:** An update was attempted on a database defined as ROSHARE READ. This reason code and the data set name are made available to the user in the SQLCA or in messages.

This reason code is issued by the following CSECTs: DSNB1SWS DSNB5FOR.

**System Action:** A “resource not available” code is returned to the user.

**User Response:** An update operation is not allowed in this database. Check to insure that the target of the update was correct, and also that the database is defined as ROSHARE READ. If the update should occur, then it should be issued on the system in which the database was defined as ROSHARE OWNER.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1.

---

**00C20107**

**Explanation:** An update was attempted in a ROSHARE OWNER database, but the data set was opened in RO mode. This reason code and the data set name are made available to the user in the SQLCA or in messages.

This reason code is issued by the following CSECTs: DSNB1SWS DSNB5FOR.

**System Action:** A “resource not available” code is returned to the user.

**User Response:** Notify the system programmer.

**System Programmer Response:** Issue the -STOP DATABASE command with the SPACENAM parameter to explicitly stop this table space/index space and then issue the -START DATABASE ACCESS(RW) command.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1.

---

**00C20108**

**Explanation:** An object in a ROSHARE OWNER database cannot be accessed. At least one system with the database defined as ROSHARE READ is still accessing it. This reason code and the data set name are made available to the user in the SQLCA or in messages.

This reason code is issued by the following CSECT: DSNB1OST

**System Action:** A “resource not available” code is returned to the user.

**User Response:** Notify the system programmer.

**System Programmer Response:** Insure that there are no systems on which the database is defined as ROSHARE READ that are still accessing the database. Issue the -STOP DATABASE command with the SPACENAM parameter on the ROSHARE READ systems that are accessing the database.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1.

---

**00C20109**

**Explanation:** An object in a ROSHARE READ database cannot be accessed. The system with the database defined as ROSHARE OWNER still has RW access. This reason code and the data set name are made available to the user in the SQLCA or in messages.

This reason code is issued by the following CSECT: DSNB1OST

**System Action:** A “resource not available” code is returned to the user.
User Response: Notify the system programmer.

System Programmer Response: On the system in which the database is defined as ROSHARE OWNER, perform the following tasks:

- Use the -DISPLAY DATABASE command to ensure there are no exceptional states for this table space or index.
- Issue the -STOP DATABASE command with the SPACENAM parameter to stop this table space or index.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1.

00C2010A

Explanation: DB2 is attempting to open a shared data set in a ROSHARE READ database, but the system cannot locate the data set. The table space or index might already be dropped from the owning system.

System Action: A 'resource not available' code is returned to the user. This reason code and the data set name are made available to the user in the SQLCA or in messages.

User Response: Notify the system programmer.

System Programmer Response: Run IDCAMS LISTCAT to verify the existence of this data set. Verify whether the associated table space or index exists in the database defined as ROSHARE OWNER. If not, issue DROP TABLESPACE or INDEX on all systems in which the database is defined as ROSHARE READ.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1.

This reason code is issued by the following CSECT: DSNB1OST

00C2010B

Explanation: DB2 is attempting to open a shared data set in a database defined for ROSHARE, but the data set cannot be accessed because it is not defined with SHAREOPTIONS(1,3).

System Action: A 'resource not available' code is returned to the user. This reason code and the data set name are made available to the user in the SQLCA or in messages.

User Response: Notify the system programmer.

System Programmer Response: Ensure that this data set belongs to a shared database, and check the SHAREOPTIONS using IDCAMS LISTCAT. If so, use AMS ALTER SHAREOPTIONS to alter the data set to SHAREOPTIONS(1,3), and resubmit the failing application.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1.

This reason code is issued by the following CSECT: DSNB1OST

00C2010C

Explanation: DB2 was unable to update the high-used RBA in the VSAM volume data set (VVDS) when it was ready to close a data set. VVDS must be updated to reflect data loaded by a RECOVER, LOAD, or REORG utility job. Message DSNB200I is issued to the console with the VSAM media manager return codes.

This reason code and the data set name are recorded in the cursor table (CT) and made available in the SQLCA or in messages.

This reason code is issued by the following CSECT: DSNB1CST

System Action: A 'resource not available' code is returned to the user. A DSNB200I message is issued to the console. DB2 continues to close the data set.

User Response: Contact the system programmer. Restart or rerun the RECOVER, LOAD, or REORG job after the system programmer corrects the error.

System Programmer Response: Refer to system messages IEC161I and DB2 message DSNB200A for assistance in determining the cause of the error. Correct the condition, and notify the user to reinvoke the application.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 10, 11.

00C2010D

Explanation: DB2 was unable to open a required data set because an unexpected level ID was encountered.

The reason code and the data set name are made available in the SQLCA or in messages.

System Action: A 'resource unavailable' code is returned to the user. Message DSNB232I is issued to the console if it was not already issued for the data set. DB2 failed to open the data set.

Operator Response: Notify the system programmer.

System Programmer Response: Refer to message DSNB232I for help in determining the cause of the error. Run the utility REPAIR LEVELID or recover the table space or index, and then tell the user to rerun the application.

Problem Determination: This reason code is issued by the following CSECT: DSNB1OPD

00C2010E

Explanation: This is a DB2 internal error. DB2 encountered a problem while trying to add a page to the logical page list (LPL).

System Action: The requesting execution unit is abended.

Operator Response: Notify the system programmer, print SYS1.LOGREC, and request an SVC dump.

Problem Determination: Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

This reason code is issued by the following CSECT: DSNB1LPL
00C2010F

Explanation: This dump provides assistance for diagnosing the page latch time-out problem after 00C20031 is returned as the reason code for 'resource not available'.

System Action: The requesting execution unit is abended to take a diagnostic dump then recovered to return an SQLCODE -904 (resource not available) to the user with the 00C20031 reason code. The resource name is also provided.

User Response: Notify the system programmer.

Problem Determination: This reason code is issued by the following CSECT: DSNB1OPP.

00C20203

Explanation: DB2 cannot connect to a group buffer pool. The group buffer pool is not usable by this release of DB2. This DB2 subsystem is a member of a data sharing group containing DB2 members of different release levels. A later release level of DB2 specified an option for this group buffer pool that is not supported by the previous DB2 releases. The presence of this option makes the group buffer pool inaccessible to the previous DB2 releases.

System Action: DB2 takes the following actions:
- Unless already issued, message DSNB301E is sent to the console with this reason code to indicate that a connect failure occurred.
- SQLCODE -904 (resource not available) is returned to the user with this reason code. The resource type and resource name are also returned.

User Response: Contact the system programmer.

System Programmer Response: Do one of the following:
- Issue the -ALTER GROUPBUFFERPOOL command from a DB2 that is at the later release level to remove the new option so that previous release levels of DB2 can access the group buffer pool.
- Migrate the previous release levels to the current release.

Problem Determination: This reason code is issued by the following CSECT: DSNB1GC0

00C20204

Explanation: DB2 is unable to connect to a group buffer pool because MVS detected a problem on the IXLCONN request.

System Action: SQLCODE -904 (resource not available) and the group buffer pool name are returned to the user. Unless already issued for the IXLCONN code, message DSNB301E, which contains this reason code and the IXLCONN code, is issued to the console.

User Response: Contact the system programmer.

Problem Determination: The reason code returned by the IXLCONN request is given in message DSNB301E.

If the connection problem was caused by insufficient storage in a coupling facility, the MVS system administrator will attempt to alleviate the storage constraint problem by making additional storage available to the involved coupling facility, or by changing the active MVS CFSM administrative policy to redefine the coupling facility structure to a different coupling facility. Another alternative is to have the database administrator reassign those inter-DB2 sharing page sets to a different DB2 buffer pool.

Refer to MVS/ESA Programming: Sysplex Services Reference for the MVS IXLCONN reason code.

This abend reason code is issued by the following CSECT: DSNB1GC1
Explanation: DB2 is unable to access a group buffer pool because of a damage assessment pending (DAP) status against the group buffer pool.

System Action: The action DB2 takes depends on the situation, as follows:

- If DB2 tries to read a page from the group buffer pool and finds that the group buffer pool is in DAP status, the following actions are taken:
  - SQLCODE -904 (resource not available) is returned to the user with this reason code. The name of the group buffer pool is also returned.

- If DB2 tries to read a page from the group buffer pool for rollback, backout, or restart and finds that the group buffer pool is in DAP status, the following actions are taken:
  - The page is added to the logical page list (LPL) for the page set.
  - Message DSNB250E is issued to the console with this reason code.

- If DB2 tries to write a page to the group buffer pool and finds that the group buffer pool is in DAP status, the following actions are taken:
  - The page is added to the logical page list (LPL) for the page set.
  - Message DSNB250E is issued to the console with this reason code.

- If DB2 detects DAP status when it tries to connect the group buffer pool, or if DB2 detects a group buffer pool version ID mismatch after a successful connection, the following actions are taken:
  - The damage assessment process is triggered for this group buffer pool.
  - SQLCODE -904 (resource not available) is returned to the user with this reason code. The name of the group buffer pool is also returned.
  - Unless already issued, message DSNB301E, which contains this reason code, is issued to the console.

User Response: Contact the system programmer.

System Programmer Response: Message DSNB304I is issued when the group buffer pool is entered into DAP state and message DSNB305I is issued when the DAP status is cleared. During the damage assessment process, DB2 must determine which page sets or partitions might have had changed pages in the failed coupling facility structure and thus need to be recovered. Each page set/partition fitting this criteria is entered into 'group buffer pool REBUILD pending (GRECP)' status. A page set/partition in GRECP status remains unavailable for read or update until it is recovered.

Problem Determination: This reason code is issued by the following CSECT: DSNB1GC0

Explanation: An attempt was made to access a page which is currently in the logical page list (LPL). LPL pages are unavailable until recovery on the affected page set completes.

System Action: SQLCODE -904 (resource not available) is returned to the user with this reason code. The resource name is also given.

User Response: Contact the system programmer.

System Programmer Response: For those page sets in the LPL, use the RECOVER utility or the -START DATABASE command.

Problem Determination: This reason code is issued by the following CSECTs: DSNB1LPL DSNB1GET DSNB1SWS

Explanation: DB2 is unable to connect to a group buffer pool because of a DB2 system error during connect processing. This is an internal DB2 problem.

System Action: A SYS1.LOGREC entry is produced and an SVC dump is requested for the original abend which caused this condition. After doing resource and latch recovery, DB2 retries the abend if retry is allowed. SQLCODE -904 (resource not available) is returned to the user with this reason code and the group buffer pool name. Unless already issued, message DSNB301E, which contains this reason code, is issued to the console.

Problem Determination: Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

This reason code is issued by the following CSECT: DSNB1GC1

Explanation: The user attempted to access a group-buffer-pool-dependent page set or partition. However, the DB2 member was unable to connect to the group buffer pool because there was not enough hardware system area (HSA) storage in which to allocate the local cache vector (LCV).

System Action: DB2 disconnects from the group buffer pool and issues message DSNB301E with this reason code, if it has not yet been issued. DSNB301E is usually preceded by a DSNB306I message.

SQLCODE -904 is returned to the user with this reason code.

User Response: Contact the system programmer.

System Programmer Response: Refer to message DSNB306I.

Problem Determination: Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051.

This reason code is issued by the following CSECT: DSNB1GC1
00C20210

Explanation: An attempt was made to access a page set or partition which is currently in group buffer pool recovery pending (GRECP) status.

System Action: SQLCODE -904 (resource not available) is returned with this reason code. The resource name is also given. GRECP page sets or partitions remain unavailable until recovery against the affected page set or partition is complete.

User Response: Contact the system programmer to determine when the resource will be available for use.

System Programmer Response: Use the START DATABASE command with the ACCESS RW option to recover the page set or partition and remove the GRECP status. In extreme or unusual circumstances, you can also remove GRECP status as follows:

- RECOVER, either to currency, or to a prior point in time
- REPAIR SET with NORCRVPEND
- LOAD REPLACE
- START DATABASE with ACCESS FORCE (Not recommended. Specifying this option can result in inconsistent data.)

Problem Determination: This reason code is issued by the following CSECT: DSNB1OPP

00C20211

Explanation: DB2 is unable to access a group buffer pool because the group buffer pool is rebuilding, and the attempt to access the group buffer pool timed out waiting for the rebuild to complete.

System Action: 'Resource not available' return and reason codes are sent back to the requesting function.

User Response: Resubmit the request.

System Programmer Response: Use the DB2 DISPLAY GROUPBUFFERPOOL command or the MVS D XCF,STR command to monitor the status of the rebuild. Also, monitor the status messages that the DB2 members issue as the rebuild progresses (refer to messages DSNB331I, DSNB332I, and DSNB338I). If the rebuild is not progressing satisfactorily, you can use the MVS command SETXCF,STOP,REBUILD to stop the rebuild.

System Programmer Response: Use the MVS IXLFCOMP macro for a group buffer pool.

Problem Determination: The IXLCACHE reason code saved in register 8 can help determine the cause of the error. Refer to MVS/ESA Programming: Sysplex Services Reference for the MVS IXLCACHE reason code.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

This abend reason code is issued by the following CSECTs:

- DSNB1OPP
- DSNB5SCO
- DSNB5GGO
- DSNB5PCO
- DSNB5SCM

00C20222

Explanation: While accessing a page in a buffer pool, DB2 received an unexpected error from MVS, which detected an invalid parameter on an IXLVECTR request from DB2. This code usually indicates a DB2 internal problem. However, the problem can result from errors in other products.

System Action: The requesting execution unit abends.

Problem Determination: See the IXLVECTR return code in register 8 to help determine the cause of the error. Refer to MVS/ESA Programming: Sysplex Services Reference for the MVS IXLVECTR reason code.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

This abend reason code is issued by the following CSECTs:

- DSNB1LTS
- DSNB1LTX
- DSNB1RSS

00C20223

Explanation: DB2 encountered an error while invoking the IXLCACHE macro.

System Action: The requesting execution unit abends. DB2 terminates abnormally causing MVS to reset the castout locks.

Problem Determination: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

This abend reason code is issued by the following CSECT: DSNB5PCO

00C20224

Explanation: DB2 received an unexpected return and reason code from the MVS IXLFCOMP macro for a group buffer pool.

System Action: DB2 abends the agent and requests a dump. If the group buffer pool is in duplex mode, then DB2 may stop duplexing for the group buffer pool in response to this error.

System Programmer Response: If the group buffer pool was duplexed and is entered back into simplex mode as a result of this error, and duplexing is not automatically reestablished, then use the MVS SETXCF command to enter the group buffer pool back into duplex mode if duplexing is
00C20230

Explanation: DB2 could not establish duplexing for a group buffer pool because the primary structure instance of that group buffer pool is allocated in a coupling facility that does not have CFLEVEL = 5 functionality.

System Action: The group buffer pool is entered back into simplex mode. Message DSNB741I is issued indicating the reason code as the reason why the process to establish duplexing failed.

System Programmer Response: Upgrade the coupling facilities to CFLEVER = 5 or above. Or change the PRELIST for the group buffer pool to name only coupling facilities that have CFLEVER = 5 functionality.

00C20231

Explanation: DB2 could not establish duplexing for a group buffer pool because the primary structure instance of that group buffer pool is allocated in a coupling facility that does not have CFLEVEL = 5 functionality.

System Action: The group buffer pool is entered back into simplex mode. Message DSNB741I is issued indicating the reason code as the reason why the process to establish duplexing failed.

System Programmer Response: Upgrade the coupling facilities to CFLEVER = 5 or above. Or change the PRELIST for the group buffer pool to name only coupling facilities that have CFLEVER = 5 functionality.

00C20232

Explanation: DB2 could not establish duplexing for a group buffer pool because the group buffer pool is defined with GBPCACHE(NO). DB2 does not allow GBPCACHE(NO) group buffer pools to be duplexed.

System Action: The group buffer pool is entered back into simplex mode. Message DSNB741I is issued indicating the reason code as the reason why the process to establish duplexing failed.

System Programmer Response: If duplexing is desired for the group buffer pool, issue the DB2 ALTER GROUPBUFFERPOOL command to specify GBPCACHE(YES) before trying to initiate duplexing.

00C20233

Explanation: DB2 detected a version id mismatch for the secondary group buffer pool when connecting to a duplexing group buffer pool. The version id mismatch indicates that the process to establish duplexing completed prematurely (for example due to a system failure), and thus the secondary group buffer pool in not in synch with the primary.

System Action: DB2 stops duplexing for the group buffer pool. The group buffer pool is entered back into simplex mode. Message DSNB743I is issued indicating the reason code as the reason why the process to establish duplexing was stopped. If DUPLEX(AUTO) is specified for the group buffer pool in the active CFRM policy, then duplexing is automatically reinitiated.

System Programmer Response: If duplexing is desired for the group buffer pool and duplexing is not automatically reinitiated, then use the MVS SETXCF command to initiate duplexing for the group buffer pool.

00C20251

Explanation: DB2 is unable to obtain a physical lock (P-lock) because of an out-of-storage condition detected by IRLM.

System Action: SQLCODE -904 is returned to the user with this reason code. This reason code and the resource name are returned in the cursor table (CT) and made available to the user in the SQLCA.

Operator Response: Notify the system programmer.

System Programmer Response: IRLM exhausted the amount of virtual storage available to it to represent locks. Refer to code 00C90092 for methods to reduce the storage needed by IRLM.

Problem Determination: This reason code is issued by the following CSECT: DSNB1PER

00C20252

Explanation: DB2 is unable to obtain a physical lock (P-lock). Another DB2 holds the P-lock in an incompatible state, but is unable to downgrade because it does not have access to the corresponding group buffer pool.

System Action: SQLCODE -904 (resource not available) is returned to the user. The other DB2 produces additional diagnostic information in the form of messages, trace records, SYS1.LOGREC entries, and/or an SVC dump. This reason code and the resource name are returned in the cursor table (CT) and made available to the user in the SQLCA.

Problem Determination: This reason code is issued by the following CSECT: DSNB1PER

00C20254

Explanation: DB2 is unable to acquire or upgrade a physical lock (P-lock) because of an incompatible retained lock held by one or more other DB2 subsystems in the DB2 data sharing group. Retained locks are locks that persist across DB2 abnormal terminations.

System Action: SQLCODE -904 is returned to the user. This reason code and the resource name are returned in the cursor table (CT) and made available to the user in the SQLCA.

System Programmer Response: Use the -DISPLAY DATA-BASE command to display the DB2 member names owning the retained locks. You must restart those subsystems to remove the ‘resource unavailable’ condition.

Problem Determination: This reason code is issued by the following CSECT: DSNB1PER
**00C20255**

**Explanation:** DB2 is unable to obtain a physical lock (P-lock). This is a DB2 internal error.

**System Action:** SQLCODE -904 (resource not available) is returned to the user. This reason code and the resource name are returned in the cursor table (CT) and made available to the user in the SQLCA. The other DB2 produces additional diagnostic information in the form of messages, trace records, SYS1.LOGREC entries and/or an SVC dump.

**Problem Determination:** Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

This reason code is issued by the following CSECT: DSNB1PER

**00C20256**

**Explanation:** DB2 is unable to obtain a physical lock (P-lock). This is a DB2 internal error.

**System Action:** SQLCODE -904 (resource not available) is returned to the user. This reason code and the resource name are returned in the cursor table (CT) and made available to the user in the SQLCA. The other DB2 produces SYS1.LOGREC entries, and, depending on the type of abend, might also produce an SVC dump.

**Problem Determination:** Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

This reason code is issued by the following CSECT: DSNB1PER

**00C20257**

**Explanation:** DB2 is unable to obtain a physical lock (P-lock) because of an ‘out of record list storage’ condition that IRLM detected. The record list is that part of the coupling facility lock structure that IRLM uses to record ‘modify locks’ (those locks that would be retained in case of a failure).

**System Action:** SQLCODE -904 is returned to the user with this reason code. This reason code and the resource name are returned in the cursor table (CT) and made available to the user in the SQLCA.

**System Programmer Response:** Allocate a larger coupling facility lock structure by using the MVS SETXCF,REBUILD command. Make sure that the active MVS CFRM policy specifies a larger structure size for the IRLM coupling facility lock structure before you initiate the rebuild. You can use the MVS SETXCF,STOP,POLICY and SETXCF,START,POLICY commands to change the active MVS CFRM policy.

**Problem Determination:** This reason code is issued by the following CSECT: DSNB1PER

**00C20258**

**Explanation:** DB2 is not able to obtain a physical lock (P-lock) until a peer member restarts. Another DB2 holds the P-lock in an incompatible state but cannot downgrade until it completes its restart.

**System Action:** SQLCODE -904 (resource not available) is returned to the user. This reason code and the resource name are made available to the user in the SQLCA.

**User Response:** Resubmit the failing application. The P-lock becomes available after the peer member completes its restart processing.

**Problem Determination:** This reason code is issued by the following CSECT: DSNB1PER

**00C20259**

**Explanation:** This is a DB2 internal error. This reason code and the group buffer pool name are recorded in the cursor table (CT) and made available to the user in the SQLCA or in messages.

**System Action:** A ‘resource not available’ code is returned to the user. Abend status is recorded in SYS1.LOGREC.

**Operator Response:** Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

**System Programmer Response:** Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** This reason code is issued by the following CSECT: DSNB1SCR

**00C2025A**

**Explanation:** DB2 encountered an unexpected error from IRLM while trying to acquire a global lock for MBA (multiple buffer pool) object.

**System Action:** The requesting execution unit abends. A SYS1.LOGREC entry is written and an SVC dump is requested. Collect messages DSNT376I, DSNT500I, and DSNT501I for further diagnosis.

**Problem Determination:** Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

This abend reason code is issued by the following CSECTs: DSNB1BSD, DSNB1GIO, DSNB1PM2, DSNB1PMT

**00C2025B**

**Explanation:** DB2 encountered an unexpected error while trying to read from the shared communications area (SCA) for MBA (multiple buffer pool) object.

**System Action:** The requesting execution unit abends. A SYS1.LOGREC entry is written and an SVC dump is requested.

**Problem Determination:** Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

This abend reason code is issued by the following CSECTs: DSNB1BSD, DSNB1GIO, DSNB1PM2

**00C2025C**

**Explanation:** DB2 encountered an unexpected error while trying to write to the shared communications area (SCA) for MBA (multiple buffer pool) object.

**System Action:** The requesting execution unit abends. A SYS1.LOGREC entry is written and an SVC dump is requested.

**Problem Determination:** Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

This abend reason code is issued by the following CSECTs: DSNB1BSD, DSNB1GIO, DSNB1PMT
This abend reason code is issued by the following CSECT: DSNB1BSD, DSNB1GIO, DSNB1PM2, DSNB1PMT

**00C20260**

**Explanation:** This is a DB2 internal error. Castout was unsuccessful due to an unexpected error.

**System Action:** A 'resource not available' code is returned to the user.

**User Response:** Notify the system programmer.

**System Programmer Response:** Establish this DB2's connectivity to the group buffer pool before allowing operations that reference this group buffer pool.

**Problem Determination:** Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

This reason code is issued by the following CSECT: DSNB5PCO

**00C20261**

**Explanation:** This is a DB2 internal error. Castout was unsuccessful due to a group buffer pool structure failure.

**System Action:** A 'resource not available' code is returned to the user.

**User Response:** Notify the system programmer.

**System Programmer Response:** Establish this DB2's connectivity to the group buffer pool before allowing operations that reference this group buffer pool.

**Problem Determination:** Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

This reason code is issued by the following CSECT: DSNB5PCO

**00C20262**

**Explanation:** This is a DB2 internal error. Castout was unsuccessful due to errors in writing a page to DASD.

**System Action:** A 'resource not available' code is returned to the user.

**User Response:** Notify the system programmer.

**System Programmer Response:** Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** This reason code is issued by the following CSECT: DSNB5PCO

**00C20263**

**Explanation:** This is a DB2 internal error. Castout was unsuccessful due to an unexpected error.

**System Action:** A 'resource not available' code is returned to the user. An SVC dump and the SYS1.LOGREC recording were requested.

**User Response:** Notify the system programmer.

**System Programmer Response:** Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**00C20264**

**Explanation:** DB2 is unable to acquire or upgrade a physical lock (P-lock) because at least one other DB2 subsystem in the data sharing group is holding an incompatible retained lock. The amount of time this DB2 can wait for a locked resource was exceeded. This reason code is only issued if the RETLWAIT installation parameter in DSN6SPRM is set to 'YES'. If RETLWAIT is set to 'NO' (this is the default), then any IRLM lock that conflicts with a retained lock will not wait, but instead will be immediately rejected (see reason code 00C20254).

**System Action:** An SQLCODE -904, -911, -913 or -923 is issued, and message DSNT501I is issued. Also, message DSNT378I is issued.

**System Programmer Response:** Refer to the 'System Programmer Response' in message DSNT378I.

**Problem Determination:** This reason code is issued by the following CSECT: DSNB1PER

**00C20267**

**Explanation:** DB2 is unable to recover GRECP status for a table space or index because one or more sharing group members could not perform a global drain request on the object.

**System Action:** A DB2 message of DSNB350 or DSNB351 is issued.

**User Response:** Issue a START DB command to explicitly recover the page set from GRECP/LPL status.

**System Programmer Response:** Refer to the 'System Programmer Response' in message DSNB350 or DSNB351.

**00C20268**

**Explanation:** DB2 is unable to recover GRECP status for a table space or index because one or more sharing group members could not perform a global drain request on the object. One or more peer DB2s in the group failed to drain the object because some error occurred.

**System Action:** A DB2 message of DSNB350 or DSNB351 is issued.

**User Response:** Issue a START DB command to explicitly recover the page set from GRECP/LPL status.

**System Programmer Response:** Refer to the 'System Programmer Response' in message DSNB350 or DSNB351.

**00C202A1**

**Explanation:** DB2 encountered an unexpected error while trying to read from or write to the shared communications area (SCA).

**System Action:** The requesting execution unit abends. A SYS1.LOGREC entry is written and an SVC dump is requested.

**Problem Determination:** Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
This abend reason code is issued by the following CSECT: DSNB1GBS

**00C202A2**

**Explanation:** MVS returned an unexpected error from an IXLCONN request to disconnect a group buffer pool.

**System Action:** The requesting execution unit abends. A SYS1.LOGREC entry is written and an SVC dump is requested. The IXLDISC reason code is saved in register 8 for SYS1.LOGREC recording and the SVC dump.

**System Programmer Response:** Refer to MVS/ESA Programming: Sysplex Services Reference for the MVS IXLDISC reason code.

**Problem Determination:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

This abend reason code is issued by the following CSECT: DSNB1GD1

**00C202A3**

**Explanation:** MVS returned an unexpected error from an IXLFORCE request to deallocate a group buffer pool.

**System Action:** A SYS1.LOGREC entry is written and an SVC dump is requested. The IXLFORCE reason code is saved in register 8 for SYS1.LOGREC recording and the SVC dump.

**System Programmer Response:** Refer to MVS/ESA Programming: Sysplex Services Reference for the MVS IXLFORCE reason code.

**Problem Determination:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

This abend reason code is issued by the following CSECT: DSNB1GD1

**00C202A4**

**Explanation:** MVS detected an error on an IXLCONN request from DB2.

**System Action:** A SYS1.LOGREC entry is written and an SVC dump is requested. Unless already issued, message DSNB301E, which contains this reason code, is issued to the console. The IXLCONN reason code is saved in register 8 for SYS1.LOGREC recording and the SVC dump. This reason code and the group buffer pool name are returned to the user in the SQLCA.

**System Programmer Response:** Refer to MVS/ESA Programming: Sysplex Services Reference for the MVS IXLCONN reason code.

**Problem Determination:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

This abend reason code is issued by the following CSECT: DSNB1GC1

**00C202A5**

**Explanation:** The cache coupling facility structure attributes passed back by MVS on an IXLCONN request were incorrect.

**System Action:** A SYS1.LOGREC entry is written. The newly-connected group buffer pool is disconnected. If this is a non-rebuild connect then message DSNB301E, which contains this reason code, is issued to the console (unless it has already been issued). In the message this reason code and the group buffer pool name are returned to the user in the SQLCA. If this is a rebuild connect, then message DSNB330E, which contains this reason code, is issued to the console and this reason code is used to stop the rebuild.

**Problem Determination:** Check the SYS1.LOGREC variable recording area (VRA) for the following information:

- **VRARRK30** - Error mask, set as follows:
  - If bit X ‘40’ is set, DB2 specified a structure disposition of KEEP, but the structure was not allocated this way.
  - If bit X ‘20’ is set, the data element size was not allocated as DB2 requested. VRARRK31 contains the requested data element size, and VRARRK32 contains the allocated data element size.
  - If bit X ‘10’ is set, the allocated vector was not long enough to cover the corresponding buffer pool.
  - VRARRK31 contains the requested vector length, and VRARRK32 contains the allocated vector length.

This abend reason code is issued by the following CSECT: DSNB1GC1

**00C202A6**

**Explanation:** This is a DB2 internal error. Unless already issued, message DSNB301E, which contains this reason code, is issued to the console.

**System Action:** A SYS1.LOGREC entry is written and an SVC dump is requested. The newly-connected group buffer pool is disconnected. This reason code and the group buffer pool name are returned to the user in the SQLCA.

**Problem Determination:** Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

This abend reason code is issued by the following CSECT: DSNB1GC1

**00C202A7**

**Explanation:** While processing an ALTER GROUPBUFFERPOOL command request, DB2 encountered an unexpected return code from the MVS IXCQUERY service.

**System Action:** The requesting execution unit abends. A SYS1.LOGREC entry is written. An SVC dump is requested if it appears to be a DB2 problem (return code 8 from IXCQUERY). Command processing is terminated.

**Problem Determination:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

This abend reason code is issued by the following CSECT: DSNB1AGB
**00C202AA**

**Explanation:** An error occurred in IRLM on a physical lock (P-lock) or change request from DB2. This is a DB2 internal error.

**System Action:** A record is written to SYS1.LOGREC and an SVC dump is requested. SQLCODE -904 is issued. This reason code and the resource name are returned in the SQLCA.

**System Programmer Response:** Examine SYS1.LOGREC for a previous error related to IRLM.

**Problem Determination:** Refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields in the VRA for this code are: VRARRK13, VRARRK14, VRARRK15, VRARRK30, and VRARRK33.

The information recorded with VRARRK30 is mapped as follows:

- IRLM return code (4 bytes)
- IRLM reason code (4 bytes)
- IRLM function code (1 byte)
- Lock state (1 byte)
- Flags from RLPLFLG1 (1 byte)
- Flags from RLPLFLG4 (1 byte)
- Returned cached state (1 byte)
- Unused (1 byte)
- P-lock exit reason code (2 bytes)

VRARRK33 records information from the RLPPL (mapped by DXRRLPPL) and is mapped as follows:

- RLPHSTAT (1 byte): Current held state of the P-lock by this DB2
- RLPCCCSTA (1 byte): New cached state of the P-lock for this DB2
- RLRPRSTAT (1 byte): Requested state of the P-lock by the other DB2 that is in conflict with the state held by this DB2
- Unused (1 byte)
- RLPWUID (8 bytes): Owning work unit

This abend reason code is issued by the following CSECT: DSNB1PER

**00C202AB**

**Explanation:** The IRLM UNLOCK request returned an error code when DB2 attempted to release a physical lock (P-lock). This is a DB2 internal error.

**System Action:** The requesting execution unit abends. The SVC dump and SYS1.LOGREC recording are requested.

**User Response:** Resubmit the failing application.

**System Programmer Response:** Request the SYS1.LOGREC and the SVC dump.

**Problem Determination:** Refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields in the VRA for this code are: VRARRK13, VRARRK14, VRARRK15, VRARRK30, and VRARRK33.

The information recorded with VRARRK30 is mapped as follows:

- IRLM return code (4 bytes)
- IRLM reason code (4 bytes)
- IRLM function code (1 byte)
- Lock state (1 byte)
- Flags from RLPLFLG1 (1 byte)
- Flags from RLPLFLG4 (1 byte)
- Returned cached state (1 byte)
- Unused (1 byte)
- P-lock exit reason code (2 bytes)

VRARRK33 records information from the RLPPL (mapped by DXRRLPPL) and is mapped as follows:

- RLPHSTAT (1 byte): Current held state of the P-lock by this DB2
- RLPCCCSTA (1 byte): New cached state of the P-lock for this DB2
- RLRPRSTAT (1 byte): Requested state of the P-lock by the other DB2 that is in conflict with the state held by this DB2
- Unused (1 byte)
- RLPWUID (8 bytes): Owning work unit

This abend reason code is issued by the following CSECT: DSNB1PPP

**00C202AD**

**Explanation:** There was an error during physical lock (P-lock) negotiation. This is a DB2 internal error.

**System Action:** An SVC dump and SYS1.LOGREC recording are requested. A ‘resource unavailable’ condition is returned to the P-lock requester that caused the conflict and the subsequent negotiation.

**System Programmer Response:** Request the SYS1.LOGREC and the SVC dump.

**Problem Determination:** Refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields in the VRA for this code are: VRARRK13, VRARRK14, VRARRK15, and VRARRK33.

VRARRK33 records information from the RLPPL (mapped by DXRRLPPL) and is mapped as follows:

- RLPHSTAT (1 byte): Current held state of the P-lock by this DB2
- RLPCCCSTA (1 byte): New cached state of the P-lock for this DB2
- RLRPRSTAT (1 byte): Requested state of the P-lock by the other DB2 that is in conflict with the state held by this DB2
- Unused (1 byte)
- RLPWUID (8 bytes): Owning work unit

This abend reason code is issued by the following CSECT: DSNB1PPP

**00C202AD**

**Explanation:** DB2 could not start even one castout process. A probable cause is that no virtual storage is available to acquire private buffers for the castout process.

**System Action:** The requesting execution unit abends and DB2 terminates abnormally.

**System Programmer Response:** Restart DB2 after increasing the REGION parameter value on the ssnmDBM1 startup procedure to get more virtual storage.
**Problem Determination:** This abend reason code is issued by the following CSECT: DSNB5PCO

**00C202AE**

**Explanation:** IRLM returned an invalid cached state on a physical lock (P-lock) request from DB2. This is an internal error.

**System Action:** SQLCODE -904 is issued. A record is written to SYS1.LOGREC and an SVC dump is requested.

**System Programmer Response:** Examine SYS1.LOGREC for a preceding error related to IRLM.

**Problem Determination:** Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields in the VRA for this code are: VRARRK13, VRARRK14, VRARRK15, VRARRK30, and VRARRK33.

The information recorded with VRARRK30 is mapped as follows:

- IRLM return code (4 bytes)
- IRLM reason code (4 bytes)
- IRLM function code (1 byte)
- Lock state (1 byte)
- Flags from RLPFLFG1 (1 byte)
- Flags from RLPFLFG4 (1 byte)
- Returned cached state (1 byte)
- Unused (1 byte)
- P-lock exit reason code (2 bytes)

VRARRK33 records information from the RLPPL (mapped by DXRRRLPPL) and is mapped as follows:

- RLPSTAT (1 byte): Current held state of the P-lock by this DB2
- RLPCCSTA (1 byte): New cached state of the P-lock for this DB2
- RLPSTAT (1 byte): Requested state of the P-lock by the other DB2 that is in conflict with the state held by this DB2
- Unused (1 byte)
- RLPWUID (8 bytes): Owning work unit

This abend reason code is issued by the following CSECT: DSNB1PLK

**00C202AF**

**Explanation:** There was an incompatible physical lock (P-lock) held. This is a DB2 internal error.

**System Action:** An SVC dump and SYS1.LOGREC recording are requested. A ‘resource unavailable’ condition is returned to the physical lock (P-lock) requester that caused the conflict and the subsequent negotiation.

**System Programmer Response:** Request the SYS1.LOGREC and the SVC dump.

**Problem Determination:** Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields in the VRA for this code are: VRARRK13, VRARRK14, VRARRK15, and VRARRK33.

VRARRK33 records information from the RLPPL (mapped by DXRRRLPPL) and is mapped as follows:

- RLPSTAT (1 byte): Current held state of the P-lock by this DB2
- RLPCCSTA (1 byte): New cached state of the P-lock for this DB2
- RLPSTAT (1 byte): Requested state of the P-lock by the other DB2 that is in conflict with the state held by this DB2
- Unused (1 byte)
- RLPWUID (8 bytes): Owning work unit

This abend reason code is issued by the following CSECT: DSNB1PPP

**00C202B0**

**Explanation:** This is a DB2 internal error.

**System Action:** An SVC dump and SYS1.LOGREC recording are requested. A ‘resource unavailable’ condition is returned to the physical lock (P-lock) requester that caused the conflict and the subsequent negotiation.

**User Response:** Resubmit the failing application.

**System Programmer Response:** Request the SYS1.LOGREC and the SVC dump.

**Problem Determination:** Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields in the VRA for this code are: VRARRK13, VRARRK14, VRARRK15, and VRARRK33.

VRARRK33 records information from the RLPPL (mapped by DXRRRLPPL) and is mapped as follows:

- RLPSTAT (1 byte): Current held state of the P-lock by this DB2
- RLPCCSTA (1 byte): New cached state of the P-lock for this DB2
- RLPSTAT (1 byte): Requested state of the P-lock by the other DB2 that is in conflict with the state held by this DB2
- Unused (1 byte)
- RLPWUID (8 bytes): Owning work unit

This abend reason code is issued by the following CSECT: DSNB1PPP

**00C202B1**

**Explanation:** An error occurred during physical (P-lock) negotiation. This is a DB2 internal error.

**System Action:** An SQLCODE -904 is issued. A record is written to SYS1.LOGREC and an SVC dump is requested. This reason code and the resource name are returned in the SOLCA.

**System Programmer Response:** Examine SYS1.LOGREC for a previous error related to IRLM.

**Problem Determination:** Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields in the VRA for this code are: VRARRK13, VRARRK14, VRARRK15, VRARRK30, and VRARRK33.
The information recorded with VRARRK30 is mapped as follows:

- IRLM return code (4 bytes)
- IRLM reason code (4 bytes)
- IRLM function code (1 byte)
- Lock state (1 byte)
- Flags from RLPLFLG1 (1 byte)
- Flags from RLPLFLG4 (1 byte)
- Returned cached state (1 byte)
- Unused (1 byte)
- P-lock exit reason code (2 bytes)

VRARRK33 records information from the RLPPL (mapped by DXRRLPL) and is mapped as follows:

- RLPHSTAT (1 byte): Current held state of the P-lock by this DB2
- RLPCCSTA (1 byte): New cached state of the P-lock for this DB2
- RLPCHSTAT (1 byte): Requested state of the P-lock by the other DB2 that is in conflict with the state held by this DB2
- Unused (1 byte)
- RLPWUID (8 bytes): Owning work unit

This abend reason code is issued by the following CSECT: DSNB1PER

### Explanation: 00C202B2

DB2 could not obtain a page set or partition physical lock (P-lock).

**System Action:** A 'resource unavailable' condition is returned to the user. This reason code and the resource name are returned in the cursor table (CT) and made available to the user in the SQLCA.

**System Programmer Response:** This problem might be caused by having multiple DB2 release levels in the DB2 data sharing group.

**Problem Determination:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

This abend reason code is issued by the following CSECTs: DSNB1PPP, DSNB1PPG.

### Explanation: 00C202B3

This is a DB2 internal error. The execution unit encountered an error while doing damage assessment for a group buffer pool.

**System Action:** The requesting execution unit is abended.

**Operator Response:** Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

**System Programmer Response:** Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** This reason code is issued by the following CSECTs: DSNB1DAO

### Explanation: 00C202B4

This is a DB2 internal error. The execution unit received an error return code while doing damage assessment for a group buffer pool.

**System Action:** The requesting execution unit is abended.

**Operator Response:** Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

**System Programmer Response:** Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** This reason code is issued by the following CSECTs: DSNB1CPX, DSNB1GC0, DSNB1GC1

### Explanation: 00C202B5

This is a DB2 internal error. The execution unit received an error return code while doing damage assessment for a group buffer pool.

**System Action:** The requesting execution unit is abended.

**Operator Response:** Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

**System Programmer Response:** Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** This reason code is issued by the following CSECTs: DSNB1GC0, DSNB1GC1

### Explanation: 00C202B6

This is a DB2 internal error. The execution unit received an error return code while trying to translate the DB2 member name to a member ID.

**System Action:** The requesting execution unit is abended.

**Operator Response:** Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

**System Programmer Response:** Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** This reason code is issued by the following CSECTs: DSNB1DA2

### Explanation: 00C202B7

This is a DB2 internal error. An unexpected error occurred during recovery processing from a group buffer pool link failure.

**System Action:** The requesting execution unit abends. A SYS1.LOGREC entry is written and an SVC dump is requested.

**System Programmer Response:** Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** This abend reason code is issued by the following CSECT: DSNB1LNK
**Explanation:** DB2 timed out waiting for the use count on a group buffer pool to reach zero during rebuild quiesce processing for the group buffer pool. This is a DB2 internal problem.

**System Action:** The DB2 system agent that is processing the rebuild abends and takes a dump. The rebuild is stopped. Message DSNB335I is issued indicating this reason code as the reason why the rebuild stopped.

**Problem Determination:** Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

This abend reason code is issued by the following CSECT: DSNB1xxx

---

**Explanation:** DB2 encountered a problem trying to connect to the new group buffer pool coupling facility structure while trying to rebuild the group buffer pool.

**System Action:** A dump may or may not be taken depending on the nature of the error. The rebuild is stopped. Message DSNB335I is issued indicating this reason code as the reason why the rebuild stopped.

**Problem Determination:** Check the console log for previous error messages (for example, DSNB335E or DSNB306I) to determine why DB2 could not connect to the new group buffer pool structure.

Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

This abend reason code is issued by the following CSECT: DSNB1RBC

---

**Explanation:** DB2 received an unexpected return and reason code from the MVS IXLREBLD macro during rebuild processing for a group buffer pool.

**System Action:** The DB2 system agent that is processing the rebuild abends and takes a dump. The rebuild is stopped. Message DSNB340I will be issued indicating that the IXLREBLD request failed and message DSNB335I is issued indicating this reason code as the reason why the rebuild stopped.

**Problem Determination:** See MVS/ESA Programming: Sysplex Services Reference for an explanation of the MVS IXLREBLD reason code.

Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

This abend reason code is issued by the following CSECT: DSNB1xxx

---

**Explanation:** DB2 detected that the number of changed pages in the new structure is greater than the number of changed pages in the original structure at the time that the rebuild of the group buffer pool was about to be completed.

**System Action:** DB2 abends and takes a dump. The rebuild is stopped. Message DSNB335I is issued indicating this reason code as the reason why the rebuild stopped.

**Problem Determination:** Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

This abend reason code is issued by the following CSECT: DSNB1xxx

---

**Explanation:** DB2 is unable to respond to an event that was reported by MVS. This is a DB2 internal error.

**System Action:** DB2 terminates abnormally.

**Operator Response:** Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump. Restart DB2.

**Problem Determination:** Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

This abend reason code is issued by the following CSECT: DSNB5REE

---

**Explanation:** This is a DB2 internal error. DB2 encountered an unrecoverable error while trying to add a page to the logical page list (LPL).

**System Action:** The DB2 subsystem is abnormally terminated.

**Operator Response:** Notify the system programmer, print SYS1.LOGREC, and request an SVC dump.

**Problem Determination:** Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

This reason code is issued by the following CSECT: DSNB1LPL
00C20300

Explanation: This is a DB2 internal error. The execution unit attempted to access, claim, or drain a page set or partition, but the page set was not logically opened.

This reason code is issued by the following CSECTs: DSNB1CLM DSNIOPNP DSNISGSC DSNITFFS DSNIWPS DSNUQUIA

System Action: The requesting execution unit is abended.

Operator Response: Notify the system programmer, print the SYS1.LOGREC, and request an SVC dump.

System Programmer Response: Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

00C20301

Explanation: This is a DB2 internal error. The execution unit attempted to access, claim, or drain a logical partition, but the page set is not a type 2 nonpartitioned page set.

System Action: The requesting execution unit is abended.

Operator Response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

Problem Determination: Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

This reason code is issued by the following CSECTs:

- DSNB1CLM
- DSNB1LDN
- DSNB1CPP
- DSNBWFOR
- DSNBLCLM
- DSNBDRN
- DSNBDORRN

00C20302

Explanation: This is a DB2 internal error. A page set was not logically opened by the execution unit that was attempting to do one of the following:

- Logical close a page set
- Physical close a page set or partition

This reason code is issued by the following CSECT: DSNB1DDN

System Action: The requesting execution unit is abended.

Operator Response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

System Programmer Response: Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

00C20303

Explanation: This is a DB2 internal error. A page set is not in-use, but an execution unit was attempting to do one of the following:

- Logical close a page set
- Physical close a page set or partition

This reason code is issued by the following CSECT: DSNB1CPS

System Action: The requesting execution unit is abended.

Operator Response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

System Programmer Response: Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

00C20304

Explanation: This is a DB2 internal error. During force write processing, the buffer manager detected that the write claim class count is not zero or there are pending updates on the page set or partition.

This reason code is issued by the following CSECT: DSNB1WFO

System Action: The requesting execution unit is abended.

Operator Response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

System Programmer Response: Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

00C20305

Explanation: This is a DB2 internal error. The execution unit attempted to access, claim, drain, open, or close a partition or piece, but the partition or piece number is invalid.

This reason code is issued by the following CSECTs:

- DSNB1ABP, DSNB1CLM, DSNB1CPP, DSNB1DCM, DSNB1DDN, DSNB1DRA, DSNB1GET, DSNB1SWS, DSNICLDR, DSNICLOS, DSNICLTO, DSNICMTC, DSNICMT2, DSNDALC, DSNIERTST, DSNIWPS, DSNIPNP, DSNIRCLS, DSNISGSC, DSNITFFS, DSNPXTN0, DSNUQUIA, DSNXISB2

System Action: The requesting execution unit is abended.

Operator Response: Notify the system programmer, print the SYS1.LOGREC, and request an SVC dump.

System Programmer Response: Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

00C20306

Explanation: This is a DB2 internal error.

System Action: The requesting execution unit is abended.

Operator Response: Notify the system programmer, print the SYS1.LOGREC, and request an SVC dump.

Problem Determination: Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

This reason code is issued by the following CSECTs:

- DSNB1GET, DSNB1LTS, DSNB1LTX, DSNB1SWS

00C20307

Explanation: This is a DB2 internal error.

System Action: The requesting execution unit is abended.

Operator Response: Notify the system programmer, print the SYS1.LOGREC, and request an SVC dump.

Problem Determination: Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

This reason code is issued by the following CSECT: DSNBLTCH
X'C3......' Codes

For information about the CICS transaction abend/dump code DSNC, refer to Appendix A, "CICS Transaction Abend/Dump Code" on page 1049.

00C30001
Explanation: The CICS attachment facility terminated because of errors that cannot be corrected. The attachment facility task-related user exit detected one of the following conditions:

- The life of task block (LOT) is invalid.
- The LOT and connection control table (CCT) element were disconnected before the end of a unit of recovery
- The previous application program support (APS) call failed and a commit call is being attempted

These symptoms might be caused by an overlay of the LOT and/or the CCT.

This abend reason code is issued by the following CSECTs: DSNCEMSUB DSN2MSUB

System Action: The CICS attachment facility terminates.

Operator Response: Notify the system programmer.

System Programmer Response: Analyze the dumps and system console messages for storage violations.

Problem Determination: One or more control blocks do not pass validity checks. The most probable cause is that they were overlaid by some user application. A CICS dump (DSNC) and a subtask dump (system abend X'04E' with abend reason code 00C30001) were requested. Register 9 in the CICS transaction dump contains the address of the LOT.

If the LOT is valid, CLOTCCTE contains the CCT element address, and CCCTLOT contains the LOT address. Use these pointers (CLOTCCTE and CCCTLOT) to verify the validity of the LOT and the CCT element. Both control blocks should contain seven character eye catchers (DSNCLOT and DSN2LOT) and the LOT element. Both control blocks should contain eight character eye catchers (CLOTCCTE and CCCTLOT). If they are in error, check the application program for possible storage violations.

00C30002
Explanation: The CICS attachment facility was not able to start.

This abend reason code is issued by the following CSECTs: DSNCEMSUB DSN2MSUB

System Action: The CICS attachment facility terminates.

Operator Response: Notify the system programmer.

Problem Determination: A subtask dump (system abend X'04E' with abend reason code 00C30002) is requested unless FRBRC2 equals 00F30013 or 00F30058. Within the dump, register 7 contains the address of the resource control table load module. In this load module, location CRCTCCTA contains the address of the resource control table (CCT) in subpool 99. The CCT contains the FRB control block for the IDENTIFY to DB2. The FRB control block begins at CCCTFRB within the CCT. You can also locate the FRB with the CCT control block by scanning the CCT for the FRB character string eye catcher. The FRB contains two fields, FRBRC1 and FRBRC2, which contain the return code and reason code from the IDENTIFY to the DB2 subsystem.

00C30003
Explanation: The CICS attachment facility could not complete a recover indoubt call because of the return and reason codes from DB2.

This abend reason code is issued by the following CSECTs: DSNCEMSUB DSN2MSUB

System Action: The CICS attachment facility terminates. The unit of recovery (UR) is not resolved and remains indoubt.

Operator Response: Notify the system programmer.

Problem Determination: The return code from the recover indoubt process does not allow the CICS attachment facility to complete the unit of recovery (UR). If the UR included in the error is valid, an attempt should be made to resolve the UR manually, using the DB2 -RECOVER command.

A subtask dump (system abend X'04E' with abend reason code 00C30003) is requested. Register 7 contains the address of the resource control table. Location CRCTCCTA in load module DSNCRCTx or DSN2CTx contains the address of the connection control table (CCT) in subpool 99.

The CCT contains the FRB control block, which can be located by scanning the CCT for the FRB character string eye catcher. FRBRC1 and FRBRC2 contain the return code and reason code from DB2.

A nonzero return code indicates problems specified by the reason code. Higher return codes (4, 8, and 12) indicate higher severity.

Examine the MVS console for DB2 messages that might indicate any related errors. If an SVC dump was also taken, print it as well as the SYS1.LOGREC to obtain further diagnostic information. The CICS SYSTEM LOG might help to determine the final disposition of the indoubt unit of work.

Register 6 in the subtask abend dump plus X'20' contains the address of a 16-byte area that contains the network id (NID). The last 8 bytes of the NID contain the store clock value that was passed to DB2 by CICS to identify the logical unit of work (LUW). This value can be used to correlate the DB2 unit of recovery with the CICS logical unit of work.

00C30004
Explanation: A thread subtask failed because of a validity check failure of a transaction-related life of task block (LOT).

This abend reason code is issued by the following CSECTs: DSNCEXT3 DSN2EXT3

System Action: The CICS attachment facility continues operation; however, the one subtask is abended and a subtask dump (system abend X'04E' with abend reason code 00C30004) is requested.

Because the LOT contains an ECB on which the CICS application is waiting and this error indicates the LOT was overlaid, the effect on the CICS application is unpredictable.
00C30005

**Explanation:** The CICS attachment facility could not complete a commit or abort call for a transaction because of return codes from the application program support call.

This abend reason code is issued by the following CSECTs: DSNCEXT3 DSN2EXT3

**System Action:** The CICS attachment facility continues operation, but the one subtask abends with a subtask dump (system abend X'04E' with abend reason code 00C30005). The CICS transaction that is associated with the abend is also abended with a CICS transaction dump

**Operator Response:** Notify the system programmer.

**Problem Determination:** The most probable cause is that the LOT was overlaid by some user application. In the subtask abend dump, register 7 contains the address of the resource control table (RCT).

CRCTCCTA in the RCT contains the address of the CCT, and CCCTLN in the CCT contains its length. Register 9 contains the CCT element that was assigned to the application in error.

This CCT element address can be validated by ensuring that it lies within the CCT. If the CCT address is valid, CCCTLLOT contains the address of the LOT in error. To determine the source of the error, analyze the subtask dump and check the CICS master terminal for any storage violation messages.

Refer to the reason code in Section 4. DB2 Codes on page 577 and prepare a search argument, using the reason code as the appropriate keyword. If the reason code is not listed, it is an internal code that is useful only as a keyword.

If an SVC dump was also taken, print it as well as the SYS1.LOGREC and prepare a search argument, using the reason code as the appropriate keyword. If the reason code is not listed, it is an internal code that is useful only as a keyword.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

00C30006

**Explanation:** The CICS attachment facility failed because of return codes from the MVS ATTACH macro while attempting to start a thread subtask.

This abend reason code is issued by the following CSECTs: DSNCMSUB DSN2MSUB

**System Action:** The CICS attachment facility terminates.

**Operator Response:** Notify the system programmer.

**Problem Determination:** The return code from the establish exit process does not allow the CICS attachment facility to start. A subtask dump (system abend X'04E' with abend reason code 00C30006) is requested. To determine why the ATTACH failed, use the MVS dump, MVS system trace, SYS1.LOGREC, and MVS console listing. Refer to the appropriate MVS publication to interpret the meaning of return codes from the MVS ATTACH macro.

Refer to the reason code in Section 4. DB2 Codes on page 577. If the reason code is not listed, it is an internal code that is useful only as a keyword.

If an SVC dump was also taken, print it as well as the SYS1.LOGREC to obtain further diagnostic information.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

00C30007

**Explanation:** The start of the CICS attachment facility failed because of return codes while attempting to establish a shutdown listen exit with DB2.

This abend reason code is issued by the following CSECTs: DSNCMSUB DSN2MSUB

**System Action:** The CICS attachment facility terminates.

**Operator Response:** Notify the system programmer.

**Problem Determination:** The return code from the establish exit process does not allow the CICS attachment facility to start. A subtask dump (system abend X'04E' with abend reason code 00C30007) is requested. Register 7 contains the address of the resource control table (RCT).

Location CRCTCCTA in the RCT load module (DSNCRCTx or DSN2CRTxx) contains the address of the connection control table (CCT) in subpool 99. The CCT contains the FRB control block, which can be located by scanning the CCT for the FRB character string eye catcher. FRBRCA and FRBRC2 contain the return code and reason code from DB2.

A nonzero return code indicates trouble specified by the reason code. Higher return codes (4, 8, and 12) indicate higher severity.

Refer to the reason code in Section 4. DB2 Codes on page 577. If the reason code is not listed, it is an internal code that is useful only as a keyword.

If an SVC dump was also taken, print it as well as the SYS1.LOGREC to obtain further diagnostic information.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

00C30008

**Explanation:** The start of the CICS attachment facility failed while attempting to establish an ESTAE recovery exit. because of reasons indicated by the return codes.

This abend reason code is issued by the following CSECTs: DSNCMSUB DSN2MSUB

**System Action:** An X'04E' abend subtask dump is taken, and the CICS attachment facility remains partially initialized.

**Operator Response:** Notify the system programmer, and issue the DSNC STOP FORCE command.
**Problem Determination:** The return code from the ESTAE macro does not allow the CICS attachment facility to start. A subtask dump (system abend X’04E’ with abend reason code 00C30008) is requested. To determine why the ESTAE failed, use the MVS dump, MVS system trace, SYS1.LOGREC, and MVS console listing. The MVS trace contains the return code from the ESTAE macro. Refer to the appropriate MVS publication for the meaning of return codes from the MVS ESTAE macro.

**00C30009**

**Explanation:** The CICS attachment facility failed because of the return code and reason code from DB2 for the SHOW INDOUBT units of recovery process.

This abend reason code is issued by the following CSECTs: DSNCMSUB DSN2MSUB

**System Action:** The CICS attachment facility terminates, and a subtask dump is requested.

**Operator Response:** Notify the system programmer.

**Problem Determination:** The return code from the SHOW INDOUBT process does not allow the CICS attachment facility to continue. A subtask dump (system abend X’04E’ with abend reason code 00C30009) is requested. Register 7 contains the address of the resource control table (RCT).

Location CRCTCCTA in the RCT load module (DSNCRCTx or DSN2CTxx) contains the address of the connection control table (CCT) in subpool 99. The CCT contains the FRB control block, which can be located by scanning the CCT for the FRB character string eye catcher. FRBRC1 and FRBRC2 contain the return code and reason code from DB2.

A nonzero return code indicates trouble specified by the reason code. Higher return codes (4, 8, and 12) indicate higher severity. Analyze the subtask dump.

Refer to the reason code in "Section 4, DB2 Codes" on page 577] If the reason code is not listed, it is an internal code that is useful only as a keyword.

If an SVC dump was also taken, print it and the SYS1.LOGREC to obtain further diagnostic information.

If you suspect and error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**00C30010**

**Explanation:** An IDENTIFY call to DB2 from a CICS attachment facility connection subtask failed, indicating that DB2 is no longer active.

This abend reason code is issued by the following CSECTs: DSNCEXT3 DSN2EXT3

**System Action:** A subtask dump is requested for the failing task thread, and the automatic STOP of the CICS attachment facility is initiated.

**Operator Response:** Notify the system programmer.

**Problem Determination:** Some other error, which is the source of the failure, probably occurred prior to this action. Use the subtask dump, SYS1.LOGREC, MVS console listing, and any SVC dumps that might have been requested if DB2 failed.

**00C30011**

**Explanation:** The CICS attachment facility detected that a resource control table (RCT) entry was corrupted or overlaid since the CICS attachment facility was last started.

This abend reason code is issued by the following CSECTs: DSNCEXT3 DSN2EXT3

**System Action:** The CICS attachment facility abends CICS task with a CICS transaction abend.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Stop and then restart the CICS attachment facility to refresh the RCT.

**Problem Determination:** Analyze the CICS dumps to determine which CICS trans-id and corresponding RCT entries were affected. The CICS transaction dump contains the RCT storage at the time of the failure. Location CRCRTAUWD in the affected RCT entry was altered since the CICS attachment facility was last started. This might be caused by an application program modifying storage it does not own (a CICS storage violation).

**00C30020**

**Explanation:** A previous error occurred during create thread processing which put the transaction in a must-abort state. The only request allowed in this state is a SYNCPOINT ROLLBACK.

This abend reason code is issued by the following CSECTs: DSNCEXT1 DSN2EXT1

**System Action:** The transaction is placed in a must-abort state and remains in that state until the transaction terminates or issues a SYNCPOINT ROLLBACK. Any SQL statement issued by a transaction while in a must-abort state receive an SQLCODE -906. SYNCPOINT requests without the ROLLBACK option cause an AS77 abort.

**User Response:** If the create thread error was anticipated, and the transaction can correct the situation that caused the create thread error, the transaction might issue a SYNCPOINT ROLLBACK and continue processing.

**System Programmer Response:** If it is undesirable for a transactions to continue after create thread errors, reassemble the resource control table (RCT) and change the PCTEROP parameter to AEY9, or remove it completely and take the default.

**Problem Determination:** Unless PCTEROP=N906, this error reason code is preceded by a DSNC transaction dump, which provides diagnostic information about the create thread failure. The SQLCA also contains the SQL return code identifying the create thread error.

**00C30021**

**Explanation:** The CICS attachment facility detected an application which is using the instrumentation facility interface (IFI) and is link-edited with a back level version of the CICS attachment facility language interface module DSNCLI.

This abend reason code is issued by the following CSECTs: DSNCEXT1 DSN2EXT1

**System Action:** The transaction is abended with a DSNC abend. The life of task block (LOT) contains reason code 00C30021.
**User Response:** Relink-edit the application with the appropriate version of the CICS attachment facility language interface module DSNCLI which corresponds to the current CICS attachment facility maintenance level.

**System Programmer Response:** Ensure the appropriate level of the CICS attachment facility language interface module DSNCLI is available to all users. Discard any back level version of DSNCLI.

If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** If the problem continues to occur after link-editing the application again with the proper level of the CICS attachment facility language interface module, validate that the correct DSNCLI is being used.

The eye catcher in DSNCLI should have the proper maintenance level identified. Look at the DSNCLI, which is actually link-edited with the application to ensure the proper level.

---

**Explanation:** An application attempted to issue an SQL request when the CICS attachment was not operational. This reason code results when the attachment is in STANDBY mode and the RCT STANDBY option is “SQLCODE.”

**System Action:** The SQL request is not executed.

**User Response:** Wait until the CICS attachment facility is started. Then resubmit the transactions that failed.

**Operator Response:** Restart the CICS attachment facility after ensuring that DB2 is active.

**System Programmer Response:** Collect any dumps produced by the CICS attachment facility or DB2, the MVS system console log, and any record of -STOP DB2 commands that might have been issued. Determine if the termination of the CICS attachment facility was the result of a DB2 stop command or abnormal termination of DB2.

**Problem Determination:** The CICS attachment facility was in standby mode. This occurs if DB2 stops and the RCT STANDBY option is “SQLCODE.” Locate all the CICS attachment facility dumps and all DB2 termination dumps. Follow the problem determination procedures documented for the error conditions that caused the dumps to be produced.

---

**Explanation:** An application attempted to issue an SQL request but no thread resource was available for that request. This reason code results when the CICS-DB2 attachment DB2ENTRY definition for the transaction is disabled.

**System Action:** The SQL request is not executed.

**User Response:** Retry the transaction after the DB2ENTRY has been reenabled.

**System Programmer Response:** Enable the transaction's DB2ENTRY or set the DISABLEDACT to POOL to allow transactions in that entry to run.

---

**Explanation:** The caller's connection with DB2 terminated because the CICS attachment facility is terminating in stop force mode. This reason code indicates that the CICS attachment facility is terminating because stop force was initiated. Stop force was probably initiated by the DSNC STOP FORCE command, the STOP DB2 MODE(FORCE) command, DB2 abnormally terminating, or the CICS attachment facility abnormally terminating. If a command was not used to cause stop force processing, abnormal termination dumps are produced by either DB2 if it is abnormally terminating, or by the CICS attachment facility if it is abnormally terminating.

This abend reason code is issued by the following CSECTs: DSNCEXT1 DSN2CEXT1

**System Action:** All current requests are returned with an indication that the CICS attachment facility is terminating.

**User Response:** Wait until the CICS attachment facility is restarted; then resubmit the transactions that failed.

**Operator Response:** Restart the CICS attachment facility after ensuring that DB2 is active.

**System Programmer Response:** Collect any dumps produced by the CICS attachment facility or DB2, the MVS system console log, and any record of DSNC STOP commands that might have been issued. Determine if the termination of the CICS attachment facility was the result of a STOP command or abend.

**Problem Determination:** The CICS attachment facility was forced into termination. This occurs if the DSNC STOP FORCE command is issued, if the CICS attachment facility detected an unexpected condition, if the DB2 STOP MODE(FORCE) command was issued, or if DB2 abnormally terminated. If the stop command with the force option was not issued, locate all the CICS attachment facility abnormal termination dumps and all DB2 abnormally termination dumps. Follow the problem determination procedures documented for the error conditions that caused the dumps to be produced.
X'C5......' Codes

For these codes, the standard documentation to be collected is a SYSUDUMP and a printout of the DSNTRACE data set. The standard SPUFI documentation is a SYSUDUMP and a printout of the ISPF log for this session. A SYSUDUMP data set must be allocated in advance to collect your dump. A DSNTRACE data set must be allocated in advance to collect your DSN trace stream unless you are running in the background, in which case the SYSTSPRT data set contains the DSNTRACE output. ISPF normally runs with an active log data set. ISPF suppresses dumps unless it is invoked with the TEST parameter. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

In the TSO attachment facility, the user can control whether or not message IDs are displayed. To see them, type PROFILE MSGID. To suppress them, type PROFILE NOMSGID.

The following abends can occur in the TSO attachment facility.

00C50001

Explanation: This is probably a DB2 subsystem error. DSNESM30 has detected an illegal value in the YTYPE portion of the SQLTYPE field of the SQLDA. This may have been caused by this field being overlaid in error. To determine the source of the error, analyze the SQLDA in the storage dump.

System Programmer Response: The standard SPUFI documentation should be collected. Refer to "X'C5......' Codes" for information about obtaining dumps and displaying message IDs.

Problem Determination: An illegal value was detected in the SQLTYPE field of the SQLDA. This may have been caused by this field being overlaid in error. To determine the source of the error, analyze the SQLDA in the storage dump.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051, 4, 21.

00C50002

Explanation: This is probably a DB2 subsystem error. DSNESM32 has detected an illegal value in the YTYPE portion of the SQLTYPE field of the SQLDA. This suggests that an illegal value was in the SQLTYPE field of the SQLDA.

This abend reason code is issued by the following CSECT: DSNESM32

User Response: If the problem persists, notify the system programmer.

System Programmer Response: The standard SPUFI documentation should be collected. Refer to "X'C5......' Codes" for information about obtaining dumps and displaying message IDs.

Problem Determination: An illegal value was detected in the YTYPE of the SQLDA. This may have been caused by this field being overlaid in error. Analyze the SQLDA in the storage dump to determine the source of the error.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051, 4, 21.

00C50003

Explanation: This could be either a user or a system error. SPUFI was unable to obtain the required storage via GETMAIN.

This abend reason code is issued by the following CSECTs: DSNESM10, DSNESM20

System Action: SPUFI task abends. User returns to ISPF main menu.

User Response: If the problem persists, notify the system programmer. You may have to specify a larger machine size at logon time.

System Programmer Response: If the problem persists, the standard SPUFI documentation should be collected. Refer to "X'C5......' Codes" for information about obtaining dumps and displaying message IDs.

Problem Determination: Register 2 contains the amount of storage that was requested. Message DSNE392E, in the ISPF log data set, gives the name of the module that issued this abend.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051, 4, 21.

00C50005

Explanation: This could be either a user or a system error. The DYNALLOC SVC returned an unexpected return code when attempting to allocate a data set.

This abend reason code is issued by the following CSECT: DSNESM55

System Action: The contents of the field are written to the ISPF log.

User Response: If the problem persists, notify the system programmer.

System Programmer Response: The standard SPUFI documentation should be collected. Refer to "X'C5......' Codes" for
information about obtaining dumps and displaying message IDs.

**Problem Determination:** Message DSNE381E, in the ISPF log data set, gives the return code and reason code values returned from the dynamic allocation request. Refer to the appropriate MVS publication to determine the source of the error and analyze these values.

Collect the following diagnostic items listed in Appendix B, "Problem determination on page 1051: 4, 21.

---

00C50007

**Explanation:** This is probably an error in the SPUFI code. The field describing the record format of the output data set is not valid.

This abend reason code is issued by the following CSECT: DSNESM55

**System Action:** The contents of the field are written to the ISPF log.

**User Response:** If the problem persists, notify the system programmer.

**System Programmer Response:** The standard SPUFI documentation should be collected. Refer to "X'C5......' Codes" on page 623 for information about obtaining dumps and displaying message IDs.

**Problem Determination:** Message DSNE383A, in the ISPF log data set, gives the record format of the output data set that was determined to be in error. The output data set record format must be one of the following: F, FB, FBA, V, VB, or VBA.

Collect the following diagnostic items listed in Appendix B, "Problem determination on page 1051: 4, 21.

---

00C50008

**Explanation:** This could be either a user or a system error. The DYNAALLOC SVC returned an unexpected return code when attempting to deallocate a data set.

This abend reason code is issued by the following CSECT: DSNESM55

**System Action:** The contents of the field are written to the ISPF log.

**User Response:** If the problem persists, notify the system programmer.

**System Programmer Response:** The standard SPUFI documentation should be collected. Refer to "X'C5......' Codes" on page 623 for information about obtaining dumps and displaying message IDs.

**Problem Determination:** Message DSNE384E, in the ISPF log data set, gives the return code and reason code values returned from the dynamic allocation request. Analyze these values to determine the source of the error.

Collect the following diagnostic items listed in Appendix B, "Problem determination on page 1051: 4, 21.

---

00C50009

**Explanation:** This is probably caused by an error in the SPUFI code. The SQLCODE translation service (module DSNTIAR) has returned an unexpected return code.

This abend reason code is issued by the following CSECT: DSNESM40

**System Action:** The contents of the field have been written to the ISPF log.

**User Response:** If the problem persists, notify the system programmer.

**System Programmer Response:** The standard SPUFI documentation should be collected. Refer to "X'C5......' Codes" on page 623 for information about obtaining dumps and displaying message IDs.

**Problem Determination:** Message DSNE387A, in the ISPF log data set, gives the return code value returned from DSNTIAR. The meanings of these return codes are:

- 4 More data was available than could fit into the message area provided.
- 8 The LRECL was not within the limits: 72 ≥ LRECL ≤ 240
- 12 The message area was not large enough. Message length ≥ 240
- 16 Error in message routine (IKJEFF02).

Collect the following diagnostic items listed in Appendix B, "Problem determination on page 1051: 4, 21.

---

00C50100

**Explanation:** This is probably caused by an error in the DSN command processor code. Module DSNECP66 (in the DSN command processor) called module DSNTIAR to format an error message to explain an unexpected SQL return code received by DCLGEN. DSNTIAR failed.

This abend reason code is issued by the following CSECT: DSNECP66

**User Response:** If the problem persists, notify the system programmer.

**System Programmer Response:** The standard documentation should be collected, including a DSN trace stream. Refer to "X'C5......' Codes" on page 623 for information about obtaining dumps and displaying message IDs.

**Problem Determination:** Message DSNE004E in the output gives the return code value returned from DSNTIAR. For an explanation of these return codes, see abend reason code '00C50009'.

Collect the following diagnostic items listed in Appendix B, "Problem determination on page 1051: 4, 20.

---

00C50101

**Explanation:** The user has entered the ABEND subcommand of the DSN command processor. This causes a X '04E' abend and a dump to be requested. In order to retain the dump, you must have previously allocated a SYSUDUMP or SYSADUMP data set. The ABEND subcommand can be useful for debugging.

This abend reason code is issued by the following CSECT: DSNECP19
System Action: A ‘X’04E’ abend results, and a dump is requested.

System Programmer Response: The standard documentation may be needed. Refer to "X5...... Codes" on page 623 for information about obtaining dumps and displaying message IDs.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” or page 1051 4, 20.

00C50102
Explanation: An error probably occurred in DB2 while it attempted to process an IDENTIFY request from the DSN command processor. DSN received an unexpected return code (FRBRC1 or FRBRC2) from DB2.

This abend reason code is issued by the following CSECT: DSNECP12

System Action: Immediately after writing this message, DSN abends with an abend code of X’04E’ and an abend reason code of ‘00C50102’.

User Response: If the problem persists, notify the system programmer.

System Programmer Response: See the Problem Determination section of this message.

Problem Determination: Rerun the job with DSN tracing turned on. You may need a SYSUDUMP from the TSO address space. You probably need a DB2 dump. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 4, 20.

00C50103
Explanation: An error probably occurred in DB2 while it attempted to process an ESTABLISH EXIT request from the DSN command processor. DSN received an unexpected return code (FRBRC1 or FRBRC2) from DB2.

This abend reason code is issued by the following CSECT: DSNECP12

System Action: Immediately after writing this message, DSN abends with an abend code of X’04E’ and an abend reason code of ‘00C50103’.

User Response: If the problem persists, notify the system programmer.

System Programmer Response: See the Problem Determination section of this message.

Problem Determination: Rerun the job with DSN tracing turned on. You may need a SYSUDUMP from the TSO address space. You probably need a DB2 dump. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 4, 20.

00C50104
Explanation: An error probably occurred in DB2 while it attempted to process a CREATE THREAD request from the DSN command processor. DSN received an unexpected return code (FRBRC1 or FRBRC2) from DB2.

This abend reason code is issued by the following CSECT: DSNECP13

System Action: Immediately after writing this message, DSN abends with an abend code of X’04E’ and an abend reason code of ‘00C50104’.

User Response: If the problem persists, notify the system programmer.

System Programmer Response: See the Problem Determination section of this message.

Problem Determination: Rerun the job with DSN tracing turned on. You may need a SYSUDUMP from the TSO address space. You probably need a DB2 dump. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 4, 20.

00C50108
Explanation: An error probably occurred in DB2 while it attempted to process a BIND, REBIND, or FREE request from the DSN command processor. DSN received an unexpected return code (FRBRC1 or FRBRC2) from DB2.

This abend reason code is issued by the following CSECT: DSNECP30

System Action: Immediately after writing this message, DSN abends with an abend code of X’04E’ and an abend reason code of ‘00C50108’.

User Response: If the problem persists, notify the system programmer.

System Programmer Response: See the Problem Determination section of this message.

Problem Determination: Rerun the job with DSN tracing turned on. You may need a SYSUDUMP from the TSO address space. You probably need a DB2 dump. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 4, 20.

00C50109
Explanation: An error probably occurred in DB2 while it attempted to process a TERMINATE request from the DSN command processor. DSN received an unexpected return code (FRBRC1 or FRBRC2) from DB2.

This abend reason code is issued by the following CSECT: DSNECP18

System Action: Immediately after writing this message, DSN abends with an abend code of X’04E’ and an abend reason code of ‘00C50109’.

User Response: If the problem persists, notify the system programmer.
System Programmer Response: See the Problem Determination section of this message.

Problem Determination: Rerun the job with DSN tracing turned on. You may need a SYSUDUMP from the TSO address space. You probably need a DB2 dump. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 4, 20.

00C50110

Explanation: This is a DSN command processor error. It occurs when the DSN STAX routine (DSNEBP01) is entered and the DSN control blocks cannot be located; the AEPLUSR field did not contain the CIB address.

This code is issued by the following CSECT: DSNECP01

Severity: 4

System Action: The DSN command processor abended.

User Response: If you allocated a SYSUDUMP or SYSABEND dump data set, collect the dump. Otherwise, allocate SYSUDUMP and DSNTRACE data sets, turn on DSN tracing, and try to recreate the error. Save these data sets.

00C50111

Explanation: Your application program made an instrumentation facility component application program interface (instrumentation facility interface) call to DB2 language interface module DSNELI, but your application program was not running under the DSN command processor. You must run all application programs using DSNELI under DSN. To do this, first issue the DSN command, then start your application using the RUN subcommand of the DSN command processor, and finally, when the application completes, stop DSN with an END subcommand.

This reason code is issued by the following CSECT: DSNELI

System Action: Control returns to the application. Your application can continue processing. Further attempts at instrumentation facility interface (IFI) calls will continue to produce this return and reason code.

User Response: Rerun your application under the DSN command processor.

Operator Response: Notify your system programmer.

System Programmer Response: Modify the job to invoke DSN. Initiate the application program using the RUN subcommand of the DSN command processor.
X'C6......' Code

Explanation: DB2 received return code X'20' when issuing a WTO request to display a DB2 console message. MVS sets this return code when there are no message buffers for either Multiple Console Support (MCS) or JES3, or when there is a JES3 WTO staging area excess. The WTO request is terminated. The current DB2 console message and all subsequent DB2 informational console messages are ignored until the MVS problem is corrected.

At the time of the abend, general register zero contains the return code from WTO request.

This abend reason code is issued by the following CSECT: DSNFWTO

System Action: A record is written to SYS1.LOGREC. A retry is requested and execution continues. DB2 resumes issuing console messages when the condition is corrected.
Abends in the precompiler are not intercepted via ESTAE, so standard system abends might occur. The SYNAD exit is not used, so I/O errors cause S001 or S002 abends. S04E abends are generated for precompiler internal errors. Following is a list of reason codes.

00C8901x

**Explanation:** An internal precompiler/parser consistency check failed. An S04E abend is generated. The error type and reason code are found in register 15 of the dump.

In the reason code, x is one of the following:

1. Parser received a token code of 0 from a lexical scan. A lexical scan refers to a scan of words rather than syntax.
2. Error in storage suballocation control blocks. The error might occur when a DB2 SQL statement limitation is exceeded. The SQL statement might be referencing, creating, or declaring more columns than the DB2 defined maximum number allowed for an SQL statement. Another possibility is that too many host variables are being referenced in the SQL statement.
3. Error in storage suballocation request. This error might occur because of storage constraints when building the DBRM entry for the SQL statement or because the SQL statement exceeds the DB2 maximum statement length.
4. Error in pointer structures.
5. Host variable information in the precompiler/parser dictionary or in the DBRM is not consistent with host variable information for an SQL statement. The error might occur when the precompiler misinterprets an illegal host variable declaration.
6. Unexpected value for parser option.
7. Internal limit exceeded. A fully qualified name exceeds the maximum length of 255 characters.
8. Internal conversion error. An error occurred when converting a timestamp version-id.
9. Internal stack storage exhausted.

**System Programmer Response:** Obtain the SVC dump and a copy of the application program source. If the abend reason code is 00C89015, obtain a copy of the DBRM being bound (IEBCOPY).

00C89041

**Explanation:** More storage is needed, but could not be obtained during the precompiler execution. An S04E abend occurs. The error type and reason code are found in register 15 of the dump.

This reason code is issued by the following CSECT: DSNHCORE

**System Programmer Response:** The storage required for the current statement could not be acquired or exceeds the maximum (64KB) for a single request. If the region is full, determine if the region can be expanded. If it cannot be expanded, the SQL statement is too large to be processed.
X'C9......' Codes

00C90060
Explanation: On a READS request, the return area supplied was not large enough to hold one log record. No log record is returned, but the position is held in the log.
System Action: The requested operation (decompression) is not performed.
Problem Determination: The system returns the size of the return area that is required in field IFCABSRQ of the IFCA return area.
User Response: Increase the size of the return area.

00C90063
Explanation: On a READS request for IFCID 306, log records are returned, but data is not decompressed as requested.
Problem Determination: See the reason code in field QW0306DG to determine why decompression was not performed. One reason code might be 00C90064, which means that the decompression dictionary changed since the log record was written.
Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting problems.

00C90064
Explanation: The decompression dictionary changed since the log record was written. The log record is returned with compressed data.
This reason code is issued by the following CSECT: DSNIDML
Problem Determination: See the reason code in field QW03DML to determine why decompression was not performed.
User Response: Specify a valid WQALLRBA value and reissue the request.
Problem Determination: The specified RBA/LRSN value might be too old.

00C9006D
Explanation: The compression dictionary for the table space or partition cannot be stored in the table space or partition.
This abend reason code is issued by the following CSECTs: DSNIZLDL, DSNIDLOD
System Action: The table space or partition is implicitly stopped by DB2. Messages DSNT501I and DSNI004I are displayed to inform the operator that the dictionary and the object for which the dictionary is defined are unavailable. An SQLCODE -904 is returned to the SQL end user.
Operator Response: Notify the system programmer.
System Programmer Response: Correct the problem and inform the user to resubmit the request. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

00C9007F
Explanation: The compression dictionary for the table space or partition is invalid. Therefore, the table space or partition cannot be opened.
This abend reason code is issued by the following CSECT: DSNIZLDL
System Action: The table space or partition is implicitly stopped by DB2. Messages DSNT501I and DSNI004I are displayed to inform the operator that the dictionary and the object for which the dictionary is defined are unavailable. An SQLCODE -904 is returned to the SQL end user.
Operator Response: Notify the system programmer.
System Programmer Response: Recover and start the table space or partition and tell the user to resubmit the request.

00C90080
Explanation: An attempt was made to allocate a resource for update operations. However, the resource was already started for read-only access.
This reason code is issued by the following CSECTs: DSNIDBCA, DSNIDBCI, DSNIDBCN, DSNIDBCP
System Action: The allocation process is not allowed.
User Response: Determine when the resource is started for read/write access, and rerun the job.
Operator Response: If this reason code appears in message DSNT501I, determine whether the named resource should be started for read-only access.
Problem Determination: The requested operation is not performed. An SQLCODE -904 is issued, and/or message DSNT501I is issued. For more information, refer to the SQL
return code in "Section 2. SQL Return Codes" on page 17 or to the description of the DSNT501I message in "DSNT... Messages" on page 315.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this code are: VRARRK13, VRARRK14, and VRARRK15.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 3, 5, 32.

00C90081

Explanation: An attempt was made to allocate a resource that is stopped for all access.

This reason code is issued by the following CSECTs:

DSNIDBCCA DSNIDBCI DSNIDBCJ DSNIDBCN DSNIDBCP DSNIDBCQ DSNISTPS

System Action: The allocation process is not allowed.

User Response: Determine when the resource is no longer stopped and rerun the job.

Operator Response: If this reason code appears in message DSNT500I or DSNT501I, determine whether the resource should be stopped.

Problem Determination: The requested operation is not performed. An SQLCODE -904 or -923 is issued, and/or message DSNT500I or message DSNT501I is issued. For more information, refer to the SQL return code in "Section 2. SQL Return Codes" or to the description of the DSNT500I or DSNT501I message in "DSNT... Messages".

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this code are: VRARRK13, VRARRK14, and VRARRK15.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 3, 5, 32.

00C90083

Explanation: An attempt was made to allocate a resource for update operations. However, the resource is already allocated to a DB2 utility function that allows other users to have read-only access.

This reason code is issued by the following CSECTs:

DSNIDBCJ DSNIDBCO DSNIDBCQ

System Action: DB2 determines whether there is a utility function that would prohibit allocation of the resource. If it finds an indication of a such a utility, the allocation of the resource is not allowed.

User Response: Determine when the resource is no longer restricted by a utility and is started for read/write access, and rerun the job.

Problem Determination: The requested operation is not performed. An SQLCODE -904 or -923 is issued, and/or message DSNT500I is issued. The resource allocated to the DB2 utility function might be either in use by a utility or reserved for a utility. If the resource is reserved for a utility, but not currently in use, the -DISPLAY UTILITY command will indicate that no utilities are operating on that object. To access a resource that is reserved for a utility, use the -TERM UTILITY command. For more information, refer to the SQL return code in "Section 2. SQL Return Codes" on page 17 or to the description of the DSNT501I message in "DSNT... Messages" on page 315.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this code are: VRARRK13, VRARRK14, and VRARRK15.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 3, 5, 32, 72.
00C90084

Explanation: The temporary file with the page size shown in NAME is not available. An error was detected either during the opening of the page set or during the formatting of the header and the space map pages of the page set.

This reason code is issued by the following CSECTs: DSNIWKF, DSNITFFS

System Action: DB2 startup/restart continues if this reason code appears in a DSNT500I message issued during the startup process.

If the reason code appears in a DSNT500I message issued during the -START DATABASE command, the request fails. In either case, the temporary file function does not allocate any temporary file on the page set.

User Response: Delete and redefine the temporary data set(s) in question, and then issue the -START DATABASE command to start the temporary file.

Problem Determination: The requested operation is not performed. An SQLCODE -904 is issued, and/or message DSNT500I is issued. For more information, refer to the SQL return code in "Section 2. SQL Return Codes" on page 17, or to the description of the DSNT500I message in "DSNT... Messages" on page 315

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this code are: VRARRK13, VRARRK14, and VRARRK15. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 3, 4, 5, 10, 32.

00C90085

Explanation: The limit of 253 extends for a temporary file has been reached.

One of the following could be the reason.

- Large number of concurrent transactions requiring use of temporary files.
- Small primary/secondary quantity defined for table space(s) in temporary file database.
- Inadequate space allocated to temporary file database.

This reason code is issued by the following CSECT: DSNIWCU

System Action: The request to extend temporary file is not allowed.

User Response: To resolve the above situation, do one of the following:

- Reduce the number of concurrent transactions.
- Increase primary/secondary quantity defined for the table space(s) in the temporary file database.
- Increase space allocated to temporary file database.

Problem Determination: The requested operation is not performed. An SQLCODE -904 is issued, and/or message DSNT500I is issued. For more information, refer to the SQL return code in "Section 2. SQL Return Codes" on page 17, or to the description of the DSNT500I message in "DSNT... Messages" on page 315

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this code are: VRARRK13, VRARRK14, and VRARRK15. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 3, 4, 5, 10, 32.

00C90087

Explanation: A page that is marked as ‘broken’ has been read. The database, table space or index space, and the page number are identified in NAME.

This reason code is issued by the following CSECT: DSNIADBB

System Action: The data manager function that detected this condition returns a ‘resource not available’ condition to its invoker. Access to the page is not permitted until it is repaired.

User Response: If the TYPE is ‘00000300’, examine the name to determine if the page is in an index space or a table space. Use the REPAIR utility to fix the broken page.

Problem Determination: The requested operation is not performed. An SQLCODE -904 or -923 is issued, and/or message DSNT501I is issued. For more information, refer to the SQL code in "Section 2. SQL Return Codes" on page 17, or to the description of the DSNT501I message in "DSNT... Messages" on page 315

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this code are: VRARRK13, VRARRK14, and VRARRK15. If you suspect an error in DB2, refer to Section 3 of DB2... Messages" on page 315.
of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 3, 5, 32.

00C90088

Explanation: The resource identified by NAME in message DSNT501I is involved in a deadlock condition.

This reason code is issued by the following CSECT: DSNLILMCL

System Action: The requested operation is not performed.

User Response: Rerun the application.

System Programmer Response: If the deadlock condition becomes chronic, examine the mix of applications running to determine why the deadlock is occurring.

Problem Determination: The requested operation is not performed. An SQLCODE -911, -913, or -923 is issued, and/or message DSNT501I is issued. For more information, refer to the SQL return code in "Section 2. SQL Return Codes" on page 17 or to the description of the DSNT501I message in "DSNT... Messages" on page 315.

If statistics trace class 3 is active, IFCID 172 contains diagnostic information. For a discussion of the effects of locking, see Section 5 (Volume 2) of DB2 Administration Guide. If you suspect and error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 3, 5, 18, 32, 36, 38.

00C90089

Explanation: The environmental descriptor manager (EDM) function of the data manager subcomponent did not have enough storage in its pool or data space to support the retrieval of object with ID 'object id' (DBD ID, SKCT plan name or SKPT package name). The object can be either a database descriptor (DBD), a skeleton cursor table (SKCT) or a skeleton package table (SKPT).

This reason code is issued by the following CSECTs:

DSNGEDLC DSNGDLC
DSNGEDST DSNGDST
DSNGEELC DSNGEELC
DSNGEFSP

System Action: The requested operation is not performed.

User Response: Invoke the application again. If, after several attempts, there is still not enough space, the following actions can be taken to reduce EDM storage requirements:

- Reduce the number of concurrent users using DB2.
- Try reducing the number of SQL statements in the plan or package and rebind.
- Try to simplify the database design—for example, reduce the number of partitions in the database.

To increase the EDM pool size definition, on the UPDATE install panels:

- If EDM storage shortage is a recurring problem, change the installation parameters that affect the size of the EDM pool—that is, increase the number of concurrent users and the number of currently active databases, then restart DB2.

Problem Determination: The requested operation is not performed. An SQLCODE -904 or -923 is issued, and/or message DSNT501I is issued. For more information, refer to the SQL return code in "Section 2. SQL Return Codes" on page 17, or to the description of the DSNT501I message in "DSNT... Messages" on page 315.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this code are: VRARRK13, VRARRK14, and VRARRK15. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on the identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 3, 5, 32.

00C9008A

Explanation: The database procedure installation exit identified by NAME could not be loaded for execution.

This reason code is issued by the following CSECTs: DSNIREDR, DSNIENSR

System Action: The requested operation is not performed.

User Response: Determine the reason the installation exit could not be loaded, correct the problem, and rerun the job.

Problem Determination: The requested operation is not performed. An SQLCODE -904 is issued, and/or message DSNT501I is issued. For more information, refer to the SQL return code in "Section 2. SQL Return Codes" on page 17, or to the description of the DSNT501I message in "DSNT... Messages" on page 315.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this code are: VRARRK13, VRARRK14, and VRARRK15. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on the identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 3, 5, 32.

00C9008B

Explanation: An attempt was made to create a database, but no DBIDs are available; that is, the system limit has been reached.

This reason code is issued by the following CSECT: DSNGDGID

System Action: The create is not allowed.

User Response: DROP all unused databases, and rerun the job.

Problem Determination: The requested operation is not performed. An SQLCODE -904 is issued, and/or message DSNT501I is issued. For more information, refer to the SQL return code in "Section 2. SQL Return Codes" on page 17, or to the description of the DSNT501I message in "DSNT... Messages" on page 315.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this code are: VRARRK13, VRARRK14, and VRARRK15. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on the identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 3, 5, 32.
00C9008C

Explanation: An attempt was made to allocate or bind to a partitioned table space for which no clustering index was defined.

This reason code is issued by the following CSECTs: DSNISPSC, DSNICUBC, DSNALLC

System Action: The bind or allocation process is not allowed.

User Response: Define the clustering index for the partitioned table space, and rerun the job.

Problem Determination: The requested operation is not performed. An SQLCODE -904 is issued, and/or message DSNT501I is issued. For more information, refer to the SQL return code in "Section 2. SQL Return Codes" on page 17 or to the description of the DSNT501I message in "DSNT... Messages" on page 315

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this code are: VRARRK13, VRARRK14, and VRARRK15. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B "Problem determination" on page 1051: 1, 3, 5, 15, 17, 32, 33, 35.

00C9008D

Explanation: An attempt was made to bind to a table space that had an incomplete clustering definition.

This reason code is issued by the following CSECTs: DSNISPSC, DSNISPSI

System Action: The bind process is not allowed.

User Response: Complete the clustering definition for the table space, and rerun the job.

Problem Determination: The requested operation is not performed. An SQLCODE -904 is issued, and/or message DSNT501I is issued. For more information, refer to the SQL return code in "Section 2. SQL Return Codes" on page 17 or to the description of the DSNT501I message in "DSNT... Messages" on page 315

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this code are: VRARRK13, VRARRK14, and VRARRK15. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B "Problem determination" on page 1051: 1, 3, 5, 15, 17, 32, 33, 35.

00C9008E

Explanation: A lock request for the resource identified by NAME could not be granted, and the request waited for a period longer than the maximum specified by the installation.

This reason code is issued by the following CSECT: DSNILMCL

System Action: The data manager function that detected this condition returns 'resource not available' to its invoker.
Message DSNT378I might also be issued.

Problem Determination: The requested operation is not performed. An SQLCODE -904, -911, -913, or -923 is issued, and/or message DSNT501I is issued. For more information, refer to the SQL return code in "Section 2. SQL Return Codes" on page 17 or to the description of the DSNT501I message in "DSNT... Messages" on page 315

If a time-out occurs, see also the "System Programmer Response" in message DSNT376I for problem determination.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this code are: VRARRK13, VRARRK14, and VRARRK15. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B "Problem determination" on page 1051: 1, 3, 5, 18, 32, 36, 38.

00C9008F

Explanation: The database descriptor’s size (DBD) has reached the limit of 25% of the EDM Pool size.

This reason code is issued by the following CSECT: DSNDCDPD

System Action: The request to create/alter a database object is not allowed.

User Response: Create the database object in a different database or drop unused database objects from the database. If you drop an object that is an index or a table space, the space becomes available in the DBD as soon as the drop is committed. If you drop an object that is a table, the space in the DBD is made available only after all of the following:
- The DROP is committed.
- The DB2 REORG is run on the table space and there is no point in time recover after the REORG.
- MODIFY is run to delete all image copies of data that contains rows of the dropped table, that is, copies that were taken before the REORG. Note that MODIFY will reclaim space in the DBD only if there are SYSSCOPY rows to delete.

Problem Determination: The requested operation is not performed. An SQLCODE -904 is issued, and/or message DSNT501I is issued. For more information, refer to the SQL return code in "Section 2. SQL Return Codes" on page 17 or to the description of the DSNT501I message in "DSNT... Messages" on page 315

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this code are: VRARRK13, VRARRK14, and VRARRK15. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Collect the following diagnostic items listed in Appendix B, identifying and reporting the problem.

Problem determination

If you suspect an error in DB2, refer to Section 3 of the system diagnostic work area (SDWA). SIGSYS1.LOGREC contains information in the variable recording complete, gather diagnostic information to pursue the problem.

If the problem persists after jobs which hold incompatible locks request.

If the resource type is table space, table, or index, then issue the -DISPLAY DATABASE command with the LOCKS option to get a list of jobs which currently hold locks on the required resource.

If the resource type is a package, then wait for BIND activity on that package to complete before reissuing the failing request.

If the problem persists after jobs which hold incompatible locks complete, gather diagnostic information to pursue the problem.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this code are: VRARRK13, VRARRK14, and VRARRK15. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051.

# Problem determination

## 00C90090

**Explanation:** An attempt to lock a required resource failed.

**System Action:** The operation is not performed.

**User Response:** Wait for all jobs which hold a lock on the resource in an incompatible lock state to complete before reissuing the failing statement.

**Problem Determination:** The requested operation is not performed.

If the resource type is table space, table, or index, then issue the -DISPLAY DATABASE command with the LOCKS option to get a list of jobs which currently hold locks on the required resource.

If the resource type is a package, then wait for BIND activity on that package to complete before reissuing the failing request.

If the problem persists after jobs which hold incompatible locks complete, gather diagnostic information to pursue the problem.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this code are: VRARRK13, VRARRK14, and VRARRK15. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051.

---

## 00C90091

**Explanation:** The table space or index space could not be started, because there is an outstanding indoubt UR that must be resolved before the start is allowed.

This reason code is issued by the following CSECT: DSNLSTS

**System Action:** The START operation is not performed.

**Problem Determination:** Message DSN0021 is issued. See the description of that message for additional information.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this code are: VRARRK13, VRARRK14, and VRARRK15. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051.

---

## 00C90092

**Explanation:** DB2 received an out-of-storage indication from IRLM resulting from a lock, unlock, or lock change request.

This reason code is issued by the following CSECT: DSNLIMCL

**System Action:** A record is written to SYS1.LOGREC only when an abend is issued. No dump is requested.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** IRLM has exhausted the amount of virtual storage available to it to represent locks.

Insufficient virtual storage remains to satisfy this request. Refer to Section 5 of DB2 Administration Guide for the IRLM procedure to determine the amount of storage space available.

The current mix of transactions caused all available storage to be used. You can find the number of locks held by a particular transaction by either using the DB2 performance trace facility or by performing IRLM tracing. Refer to Section 5 of DB2 Administration Guide for information about the DB2 performance trace facility.

Determine what transactions were running and the number of locks they held. You might want to schedule some of these transactions at a different time.

You can reduce the total number of page or row locks that applications concurrently hold by changing the locking protocol on one or more table spaces. Use one of the following:

- ALTER TABLESPACE...LOCKSIZE ANY
- ALTER TABLESPACE...LOCKSIZE TABLESPACE
- LOCK TABLE statements

If application logic permits, reduce the number of page or row locks concurrently held for SELECT statements by re-binding application plans with isolation level of cursor stability instead of repeatable read or read stability. Refer to Chapter 5 of DB2 SQL Reference for further information on SELECT.

You can reduce the total number of LOB locks that applications concurrently hold by changing the locking protocol on one or more LOB table space. Use one of the following:

- ALTER TABLESPACE...LOCKSIZE TABLESPACE
- LOCK TABLE statement

**Problem Determination:** One or more of the following might be issued:

- An SQLCODE -904 or -923
- Message DSNT501I
- An abend

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this code are: VRARRK13, VRARRK14, and VRARRK15. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051.

---

## 00C90093

**Explanation:** An error occurred in IRLM.

This reason code is issued by the following CSECT: DSNLIMCL

**System Action:** A record is written to SYS1.LOGREC, and an SVC dump is requested.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Examine SYS1.LOGREC for a preceding error related to IRLM.

**Problem Determination:** One or more of the following might be issued:

- An SQLCODE -904 or -923
- Message DSNT501I
- An abend
SYS1.LOGREC contains the same diagnostic information in the variable recording area (VRA) as shown for abend reason code '00C90101'. The first four bytes of CTSWHY contain the return code from the IRLM function. The fifth byte of CTSWHY contains the request code, as follows:

- X'02' Lock
- X'03' Unlock
- X'04' Change

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this code are: VRARRK13, VRARRK14, and VRARRK15. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B.

### 00C90094

**Explanation:** A data set is in a state that is different from what DB2 expects. Possible causes are:

- A data set was deleted and redefined without DB2's knowledge.
- A previous DB2 failure involving the data set might have occurred.

This reason code is issued by the following CSECT: DSNIBMCL

**System Action:** The requested action is not performed. If the invoker of this module (DSNIBMCL) abends, a record is written to SYS1.LOGREC, and the invoker probably initiates a dump. If the invoker does not abend, no record is written to SYS1.LOGREC, and no dump is requested. If this occurs, an SQL return code is issued, and/or message DSNT500I is issued. If the invoker of DSNIBMCL is not a utility, the data set is placed in a stopped status.

**User Response:** If the code was received while processing a user table, DB2 determined that the data set is empty. A DROP TABLESPACE statement followed by a CREATE TABLESPACE statement and a CREATE TABLE statement defines the dropped table to DB2. Use the IDCAMS LISTCAT for the failing DB2 dataset. Check the HI-USED-RBA for this dataset; if HI-USED-RBA = 0, the dataset is empty. If it was received while processing a DB2 catalog or directory, then recover the object as specified in DB2 Administration Guide in the section "Recovering Catalog and Directory Objects".

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Correct the problem, and then use either the -START DATABASE command or the RECOVER utility to make the table space, index space, or partition deferred by the subsystem.

**Problem Determination:** Examine previous messages on the console to determine why DB2 could not access the page. A possible reason is that a back-level pack was mounted. That is, the page to which the log record applies was not yet formatted by VSAM. DB2 does not extend data sets during restart.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this code are: VRARRK13, VRARRK14, and VRARRK15. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B.

### 00C90095

**Explanation:** An attempt was made during DB2 restart to access a page in order to apply a log record but DB2 was unable to access the page. This abend reason code appears as the reason code in message DSN001I.

This abend reason code is issued by the following CSECTs: DSNIBMOC, DSNIIMPD

**System Action:** The restart of the named table space, index space, or partition is deferred by the subsystem.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Correct the problem, and then use either the -START DATABASE command or the RECOVER utility to make the table space, index space, or partition available.

**Problem Determination:** Examine previous messages on the console to determine why DB2 could not access the page. A possible reason is that a back-level pack was mounted. That is, the page to which the log record applies was not yet formatted by VSAM. DB2 does not extend data sets during restart.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this code are: VRARRK13, VRARRK14, and VRARRK15. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B.

### 00C90096

**Explanation:** The page, row or LOB lock on the page or subpage identified by NAME in message DSNT500I or DSNT501I caused the total number of page, row or LOB locks concurrently held to reach the installation maximum number of page, row or LOB locks (NUMLKUS) allowed for a single agent in the system.

This reason code is issued by the following CSECT: DSNILMCL

**System Action:** The operation that encountered this condition is not executed. If a utility job encountered this condition, the utility is stopped. Otherwise, any database updates for the statement that was executing are backed out. Any database reads for the statement that was executing are not executed. The position of the cursor is unpredictable.

**User Response:** Rerun the application after correcting the cause of this resource unavailable condition.

**Programmer Response:** Reduce the total number of page, row or LOB locks that the application concurrently holds by

When the table or index space consists of a single data set, this is specific. Otherwise, the system programmer must find the particular data set within the table or index space.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this code are: VRARRK13, VRARRK14, and VRARRK15. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B.

"Problem determination" on page 1051 1, 3, 5, 10, 32, 33, 35.
changing the locking protocol on one or more of the table spaces to table space level locking. To do this, use the ALTER
... LOCKSIZE TABLESPACE or LOCK TABLE statements.

Review the application to see if a different choice of SQL statements can be used to perform the same operation with less concurrent access to multiple tables with page, row or LOB locking.

If application logic permits, reduce the number of page, row or LOB locks concurrently held for SELECT statements by rebinding the application plan with isolation level of cursor stability instead of repeatable read or read stability, or add more frequent commits.

System Programmer Response: If the application should be able to run with the current page, row or LOB locking protocol and SQL statements, increase the NUMLKUS value for the installation to allow a higher limit of page, row or LOB locks to be concurrently held by a single application. If a utility job encountered this resource unavailable condition, the NUMLKUS value must be increased to accommodate the utility, because utilities are programmed to use the minimum number of page, row or LOB locks possible. Refer to Section 5 (Volume 2) of DB2 Administration Guide for further information about choosing the value for NUMLKUS.

Operator Response: If a utility job encountered this resource unavailable condition, terminate the utility and restart it after the cause of the resource unavailable condition has been corrected.

Problem Determination: An SQLCODE -904 and message DSNT500I or DSNT501I are issued. For more information refer to the SQL return code in "Section 2. SQL Return Codes" on page 17 or message DSNT500I or DSNT501I in "DSNT... Messages" on page 315.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this code are: VRARRK13, VRARRK14, and VRARRK15.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051 1, 3, 5, 32.

00C90098

Explanation: An attempt was made to increase read-only or write-access counts of the utility in process beyond the maximum (255) allowed.

This abend reason code is issued by the following CSECT: DSNIDBMF.

User Response: Use the -DISPLAY UTILITY command to determine how many utility jobs are currently active. If a number of utility jobs are active but not in the stopped state, notify the system programmer. If the utility jobs are running, resubmit your job after they complete.

System Programmer Response: Determine why active utilities are in the stopped state. Use the -TERM UTILITY command to terminate utilities and reduce the UIP (utility in process) counts. If no active utilities are indicated, then use the -DISPLAY DATABASE command to show which table spaces or partitions are in a UTRO or UTRW state.

Problem Determination: Message DSNT500I is issued. For more information, refer to the explanation of message DSNT500I.

00C90099

Explanation: An attempt was made to load data into a partition, but the partition is full. Based on the High Key value specified in the Index for each partition, utilities instructed Data Manager to load a record into the proper partition. This required Data Manager to build a new page with a page number one higher than the last page in the partition.

However, this new page is in the next partition.

This abend reason code is issued by the following CSECT: DSNILPG
System Action: The requested action is not performed.

User Response: Redefine the High Key values in the Index and retry the load.

If you received this code during a reorganization, query the catalog to check the PCTFREE and FREEPAGE values. You might be able to decrease the amount of free space to allow the REORG utility to complete successfully.

Operator Response: Notify the system programmer.

System Programmer Response: Use the -TERM UTILITY command to terminate the load utility and reduce the UIP (utility in process) counts.

Problem Determination: For more information, refer to the explanation of message DSNT500I in the Service Controller Messages section of this book.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051.

00C9009A

Explanation: An attempt was made to create a system database which, according to the DBID space map, has already been created. However, the catalog shows the database was not created. This discrepancy between the catalog and the space map for DBIDs may be due to an unsuccessful migration.

This abend reason code is issued by the following CSECT: DSNGDCID

System Action: Database is not created.

Operator Response: Notify the system programmer.

System Programmer Response: Drop the database, then create it (using DROP and CREATE commands). If this fails to resolve the error, follow the steps in problem determination.

Problem Determination: The requested operation is not performed. An SQLCODE -904 is issued, and/or message DSNT500I is issued. For more information, refer to the SQL return code in "Section 2. SQL Return Codes" on page 77 or to the description of the DSNT500I message in "DSNT500I Messages" on page 315

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this code are: VRARRK13, VRARRK14, and VRARRK15. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051.

00C9009B

Explanation: An attempt was made to load data into a linear table space, but the table space is full. A linear table space can contain a maximum of 64GB of data.

This abend reason code is issued by the following CSECT: DSNILPG

System Action: The requested action is not performed.

User Response: Use the -TERM UTILITY command to terminate the LOAD utility. Use ALTER TABLE SPACE to reduce the amount of free space within a page (PCTFREE) and the number of free pages within the table space (FREEPAGE).

Then retry the load. If it is a resume load job, reorganize the table space before rerunning the load.

Problem Determination: For more information, refer to the explanation of message DSNT500I in "DSNT500I Messages" on page 315.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051.

00C9009C

Explanation: An attempt was made to insert data into a partitioned table space or index space, but the partition is full. For table space partition, the data to be inserted is based on the high-key value specified in the cluster index. If it is an index space partition, the index entry to be inserted is also based on the high-key value associated with the index.

This abend reason code is issued by the following CSECTs: DSNISMPI, DSNISMXP

System Action: A 'resource not available' code is returned to the end user and the requested action is not performed. The SVC dump and the SYS1.LOGREC recording are not requested.

User Response: Notify the system programmer to redefine the partitions and rerun the job.

System Programmer Response: Refer to Section 2 (Volume 1) of DB2 Administration Guide to redefine a partition. The partition that must be redefined is identified in the DSNT501I message.

If you suspect an error in DB2 refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: For more information, refer to the explanation of message DSNT501I in "DSNT501I Messages" on page 315.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051.

00C9009D

Explanation: An attempt was made to insert data into a linear table space or index space, but the table space or index space is full. A linear table space or index space can contain a maximum of 64GB of data.

This abend reason code is issued by the following CSECTs: DSNISGP, DSNISMPI, DSNISMXP

System Action: A 'resource not available' code is returned to the end user and the requested action is not performed. The SVC dump and the SYS1.LOGREC recording are not requested.

User Response: Notify the system programmer to reclaim some free space in the associated table space or index space and rerun the job.

System Programmer Response: The table space or index space name is identified in the DSNT5011 message. If it is a table space, run the DB2 REORG utility to attempt to reclaim additional free space. If it is an index space, drop and recreate the index with a fewer number of SUBPAGES. If free space cannot be reclaimed, notify the database administrator to redistribute the data into different table spaces or index spaces.
If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** For more information, refer to the explanation of message DSNT501I in "DSNT... Messages" on page 315.

Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051: 1, 37.

---

**00C9009E**

**Explanation:** The object depends on new facilities of the release and is therefore unavailable for processing. For data-sharing systems, the object will be available on a new release in a data-sharing group. For non-data-sharing systems, the object will be available after re-migration if release fall back has occurred.

This abend reason code is issued by the following CSECTs: DSNICUBC, DSNIKESR

**System Action:** The operation is not allowed. The data manager function that detected this condition returns 'resource not available' to its invoker.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** In order to perform the operation on the object:

- For non-data sharing systems a re-migration is required.
- For data sharing systems, insure that the operation is performed on a member at the correct level of DB2.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The requested operation is not performed. An SQLCODE -904 is issued. Message DSNT500I or message DSNT501I may also be issued. For more information, refer to "Section 2. SQL Return Codes" on page 17, or to the description of the DSNT500I and DSNT501I messages in "DSNT... Messages" on page 315.

Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051: 1, 3, 5.

---

**00C9009F**

**Explanation:** A table has been referenced that has a primary key but no index exists to enforce its uniqueness. The reference is usually to a parent table when attempting to verify the referential constraint of an insert or update operation to a dependent table.

This abend reason code is issued by the following CSECTs: DSNIAALLC, DSNICUBC, DSNIKESR, DSNIRELI

**System Action:** The use of the table is not allowed.

**User Response:** Create a primary index on the referenced table.

**Problem Determination:** The requested operation is not performed. An SQLCODE -904 or -923 is issued. For more information, refer to "Section 2. SQL Return Codes" on page 17, or to the description of the DSNT501I message in "DSNT... Messages" on page 315.

---

**00C900A0**

**Explanation:** An attempt was made to allocate or access a table space or index that is in the rebuild pending status (PSRBD) or an index in pageset rebuild pending status (PSRBD).

**System Action:** The use of the object is not allowed.

**User Response:** Determine when the resource is available for use and rerun the job.

**Operator Response:** Determine whether the RECOVER utility should be run to complete recovering the object.

**Problem Determination:** The requested operation is not performed because the table space or index might be in an inconsistent state. An SQLCODE -904 and/or message DSNT501I and/or message DSNI005I is issued. For more information, refer to "Section 2. SQL Return Codes" on page 17, or to the description of the DSNT501I message in "DSNT... Messages" on page 315.

Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051: 1, 5.

---

**00C900A1**

**Explanation:** An attempt was made to allocate a table space or index that is in group recovery pending state.

**System Action:** The use of the object is not allowed.

**User Response:** Run the RECOVER utility, LOAD utility or START DATABASE command to recover the object.

**Operator Response:** Determine whether the RECOVER utility or START DATABASE command should be run to complete recovery of the object.

**Problem Determination:** The requested operation is not performed because the table space or index might be in an inconsistent state. An SQLCODE -904 and/or message DSNT501I is issued. For more information, refer to "Section 2. SQL Return Codes" on page 17, or to the description of the DSNT501I message in "DSNT... Messages" on page 315.

Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051: 1, 5.

---

**00C900A3**

**Explanation:** An attempt was made to allocate a table space, index space, or a related index space while the table space or index space was in check pending status.

This abend reason code is issued by the following CSECTs: DSNIDBCI, DSNIDBCJ, DSNIDBCN, DSNIDBCC, DSNIDBCP, DSNIDBCQ, DSNIDBET, DSNIRCCA

**System Action:** The operation is not allowed.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** The check pending status needs to be resolved before the operation will be allowed.

- If the object is a table space with referential relationships, then run the CHECK DATA utility to check for referential integrity violations.
- If the object is a base table space with LOB columns, then run the CHECK DATA utility to validate the auxiliary columns.
- If the object is a LOB table space, then run the CHECK LOB utility to validate the structure of the LOB table space.
If the object is an index space, then run the CHECK INDEX utility to verify that the index keys are consistent with the data in the table space or table space partition.

For more information, see Section 2 (Volume 1) of DB2 Administration Guide.

**Problem Determination:** The requested operation is not performed. An SQLCODE -904 or -923 is issued. For more information, refer to "Section 2. SQL Return Codes" on page 17 or to the description of the DSNT501I message in "DSNT... Messages" on page 315.

00C900A4

**Explanation:** An attempt was made to allocate a segment for a table in a segmented table space, but there are no free segments. A segmented table space can contain a maximum of 64GB of data. A segment will be allocated under one of the following conditions:

- When a table is ready to be created in a segmented table space with the CREATE TABLE statement.
- When a record is inserted/loaded into a segmented table and free space is not available from existing segments.

This abend reason code is issued by the following CSECTs: DSNISEGF, DSNISGN5

**System Action:** A 'resource not available' code is returned to the end user and the requested action is not performed.

**User Response:** Notify the system programmer to reclaim some free space in the associated segmented table space and rerun the job.

**System Programmer Response:** An SQLCODE -904 is issued, and/or message DSNT501I is issued. The segmented table space name is identified in SQLCA and/or in the DSNT501I message. If the requested function is the CREATE TABLE statement, create the table in a different segmented table space. Otherwise, run the DB2 REORG utility to attempt to reclaim additional free space. If no free space can be reclaimed, then notify the database administrator to redistribute the data into different table spaces.

**Problem Determination:** For more information, refer to the explanation of message DSNT501I in "DSNT... Messages" on page 315.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051, 1, 32, 10, and definitions of temporary file(s) involved in the error.

00C900A5

**Explanation:** The temporary file(s) is full or the maximum number of extensions for a VSAM data set(s) has been exceeded for all temporary files or the volume(s) has no space available in which to extend.

This reason code is issued by the following CSECT: DSNIXWKF

**System Action:** The reason code appears in a DSNT501I message, and the requested operation is not performed.

**User Response:** If the reason code appears in a DSNT501I message, issue -DISPLAY THREAD to determine the total number of concurrent users. If there were a large number of users using temporary file(s), resubmit the job when concurrent users are low. IDCAMS LISTCAT may be used to determine the VSAM data set(s) space allocations.

- If there was no space available on a volume(s), then clear space from the volume(s) or add more volumes to the STOGROUP or redefine the VSAM data set to concatenate more volumes.
- If the maximum number of extensions has been exceeded for the VSAM data set(s), then ALTER or delete and redefine the temporary data set(s) with a larger size.
- If all the temporary files are full, then create or define more temporary files.

Issue the -START DATABASE command to start the temporary file.

**Problem Determination:** The requested operation is not performed. An SQLCODE -904 or message DSNT501I is issued, and/or message DSNT501I is issued. For more information, refer to SQLCODE -904 in SQL Return Codes, "Section 2. SQL Return Codes" on page 17 or to the description of the DSNT501I message in "Section 3. DB2 Messages" on page 117.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051, 1, 32, 10, and definitions of temporary file(s) involved in the error.

00C900A6

**Explanation:** Access to the catalog was requested but denied because the catalog was not migrated to the current release level. The object in the catalog is available after the catalog is migrated.

This abend reason code is issued by the following CSECT: DSNICUBC

**System Action:** The operation is not allowed. The data manager function that detected this condition returns 'resource not available' to its invoker.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** To perform the operation on the object, you must migrate the catalog to the current release. To do this, run DSNTIJTC. Refer to Section 2 of DB2 Installation Guide for information about this job.

**Problem Determination:** The requested operation is not performed. SQLCODE -904 and message DSNT501I are issued. For more information refer to the SQL Return Code section or to the description of the DSNT501I message in "DSNT... Messages" on page 315.

00C900A7

**Explanation:** At allocation of a bound plan or a bound package, a lock inconsistency is detected. A DB2 internal bind error is probably responsible for this condition. The plan or the package cannot be allocated.

This reason code is issued by the following CSECT: DSNITALLC

**System Action:** The plan or the package is not allocated. A DSNT501I message is issued and an SQLCODE -923 is returned to the application.

**System Programmer Response:** Re-bind the plan or the package.

**Problem Determination:** If the problem persists after the plan or the package is rebound, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051, 1, 3, 5, 32, 33.
00C900A8

**Explanation:** The table space, index, or partition could not be started because of a failure to acquire the lock. Activity on the table space, index, or partition must quiesce before the START DB ACCESS(FORCE) command can acquire the necessary lock.

The abend reason code is issued by the following CSECT: DSNIDBCN

**System Action:** The allocation process is not allowed.

**User Response:** An attempt was made to allocate a resource that is deferred.

Collect the following diagnostic items listed in Appendix B.

---

00C900A9

**Explanation:** An attempt was made to allocate a resource that is deferred.

The abend reason code is issued by the following CSECT: DSNIDBCN

**System Action:** The allocation process is not allowed.

**User Response:** Determine the reason for which the resource was deferred and take the appropriate action to correct the problem. Such actions include issuing the START DATABASE command or running the RECOVER DATABASE command.

Collect the following diagnostic items listed in Appendix B.

---

00C900AC

**Explanation:** The requested operation is not performed. An SQLCODE -904 is issued, and/or message DSNT500I is issued. For more information, refer to the description of the DSNT500I message and the SQL return code or to the description of the DSNT501I message. SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this code are: VRARRK13, VRARRK14, and VRARRK15.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B.

---

00C900A8

**Explanation:** The table space, index, or partition could not be started because of a failure to acquire the lock. Activity on the table space, index, or partition must quiesce before the START DB ACCESS(FORCE) command can acquire the necessary lock.

The abend reason code is issued by the following CSECT: DSNISTFO

**System Action:** The START operation is not performed.

**User Response:** Wait for all activity on the table space, index, or partition to complete before reissuing the START command.

**Problem Determination:** The requested operation is not performed. Message DSNI002I is issued. For more information, refer to the description of this message in "DSN... Messages" on page 213. If the problem persists after all activity on the table space, index, or partition completes, gather diagnostic information to pursue the problem.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this code are: VRARRK13, VRARRK14, and VRARRK15. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B.

---

00C900AA

**Explanation:** The table space or index space could not be stopped because it is indoubt.

The abend reason code is issued by the following CSECTs: DSNILSTS DSNIPDBA

**System Action:** The STOP operation is not performed.

**User Response:** Resolve the indoubt unit of recovery (UR) using the RECOVER INDOUBT command.

**Problem Determination:** Message DSNI003I is issued. For more information, refer to the description of this message. If the problem persists after all indoubts with locks on the table space/index space are resolved, gather diagnostic information to pursue the problem.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this code are: VRARRK13, VRARRK14, and VRARRK15. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B.

---

00C900AB

**Explanation:** An attempt was made to allocate a resource that is in the restart pending state.

**System Action:** The use of the resource is not allowed.

**System Programmer Response:** Use the DISPLAY THREAD TYPE(POSTPONED) command to determine the status of the resource.

Use the RECOVER POSTPONED command to recover the resource if it has not already been started.

**Problem Determination:** The requested operation is not performed because the table space might be in an inconsistent state. An SQLCODE -904 is issued. For more information, refer to the "Section 2. SQL Return Codes" in topic A.2 or to the description of the DSNT501I messages in "Section 3. DSNT Messages" in topic A.3.

---

00C900AC

**Explanation:** The DB2 subsystem currently serves as a remote site tracker system. Users cannot have write access for tracker systems, and a tracker DB2 will not allow the use of any SQL statement that requires write access.

**System Action:** DB2 cannot process the operation.

**System Programmer Response:** None.

**Problem Determination:** A tracker DB2 does not allow the use of any SQL statement that requires write access, such as DDL, GRANT/REVOKE, INSERT, DELETE, or UPDATE. DB2 issues SQL code -904 in conjunction with this message. You can also find more information in the description for message DSNT501I, which DB2 issues along with this reason code.

Additionally, a tracker DB2 does not allow the use of any SQL statement that requires write access, such as DDL, GRANT/REVOKE, INSERT, DELETE, or UPDATE. DB2 issues SQL code -904 in conjunction with this message. You can also find more information in the description for message DSNT501I, which DB2 issues along with this reason code.
00C900AD  
Explanation: An attempt was made to access a resource that is in the REORG pending state.
This reason code is issued by the following CSECT:

System Action: The use of the resource is not allowed.

System Programmer Response: Use the REORG utility with SHRLEVEL(NONE) PART n1:n2 to resolve the REORG pending state. The following methods may be used to resolve the REORD pending state:

- REORG SHRLEVEL(NONE) PART (m:n)
- LOAD REPLACE tablespace
- DROP tablespace

Problem Determination: The requested operation is not performed because the table space might be in an inconsistent state. A SQLCODE -904 is issued.

00C900AE  
Explanation: An attempt was made to allocate or access an index that is in the rebuild pending status.
This abend reason code is issued by the following CSECTs:

- DSNIDBCJ
- DSNIDBCO
- DSNIDBCQ

System Action: The use of the object is not allowed.

User Response: Determine when the resource is available for use and rerun the job.

Operator Response: Determine whether the REBUILD utility should be run to complete recovering the object.

Problem Determination: The requested operation is not performed because the index may be in an inconsistent state. An SQLCODE -904 and/or message DSNT501I and/or message DSN005I is issued. For more information, refer to the description of the DSN501I message in the SQLCA or to the explanation of message DSNT500I.

00C900BA  
Explanation: A request for a drain lock for the resource identified by NAME in messages DSNT500I and DSNT501I could not be granted. The request waited for a period longer than the maximum specified by the installation.

This reason code is issued by the following CSECT: DSNILMCL

System Action: The requested action is not performed. The Data Manager function that detected this condition returns 'resource not available' to its caller.

User Response: Wait for all jobs that hold a drain lock on the resource in an incompatible state to complete before reissuing the failing statement. To display drain locks, issue a DISPLAY DB LOCKS command. In order to avoid a potential deadlock, the application should either commit or roll back to the previous COMMIT.

System Programmer Response: See SQLCODE -913 or -911 and/or message DSNT501I, which accompany this abend reason code.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 3, 5, 32, 35.

00C900BC  
Explanation: The statement depleted the record identifier (RID) storage available.
This abend reason code is issued by the following CSECT: DSNIREFS

System Action: The requested action is not performed.

Operator Response: Notify the system programmer.

System Programmer Response: Restructure the SQL statement so that fewer RIDs are needed. The best way to do this is to split the statement into two or more SQL statements equivalent to the original statement. Also, in some cases, increasing the virtual storage might eliminate the times when storage is depleted.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: SQL return code -904 and/or message DSNT500I is issued. For more information, refer to the explanation of message DSNT500I.

00C900BE  
Explanation: DB2 is unable to acquire a lock on a resource because another DB2 subsystem in the DB2 data sharing group holds an incompatible retained lock on that resource. Retained locks are locks that persist across DB2 abnormal terminations.

System Action: The requested action is not performed. SQLCODE -904 is issued. A 'resource not available' code is returned to the user. This reason code and the resource name are returned in the cursor table (CT) and made available to the user in the SQLCA.

Problem Determination: SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this code are: VRARRK13, VRARRK14, and VRARRK15.
This reason code is issued by the following CSECT: DSNILMCL

00C900BF  
Explanation: DB2 is unable to obtain a lock because IRLM detected an 'out of record list' storage condition. The record list is that part of the coupling facility lock structure that contains the 'modify locks' (those locks that would be retained in case of a failure).

This reason code is issued by the following CSECT: DSNILMCL

System Action: SQLCODE -904 is returned to the user with this reason code. This reason code and the resource name are returned in the cursor table (CT) and made available to the user in the SQLCA. If it is active, an IFCID 0021 trace record is written and might contain additional diagnostic information.
System Programmer Response: If this becomes a prevalent problem, you will need to redistribute the coupling facility lock structure storage resource to make more room for the record list. You can do this in one of two ways:

- issue a rebuild, or
- dynamically change the lock structure size

See Chapter 7 of DB2 Data Sharing: Planning and Administration for more details about these options.

00C900C0 >

Explanation: A request for an internal lock could not be granted. The request waited for a longer period than is allowed.

System Programmer Response: See SQLCODE -911 or -913 and/or message DSNT500I, which accompany this reason code. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

00C900C1

Explanation: An attempt was made to allocate an index that has one or more logical partitions in a rebuild pending state.

System Programmer Response: See SQLCODE -911 or -913 and/or message DSNT500I, which accompany this reason code. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

00C900C5

Explanation: An attempt was made to access a table space that is in the auxiliary check pending state (ACHKP).

System Programmer Response: Use the CHECK DATA utility to identify the invalid LOBs. Use the SQL UPDATE statement to replace the invalid LOBs or the SQL DELETE statement to remove the rows with the invalid LOBs. After rectifying all invalid LOBs, run CHECK DATA again to clear the ACHKP state from the table space.

Problem Determination: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

00C900C6

Explanation: DB2 detected an uncommitted write on an index being altered to change the type during the same commit scope. This is not allowed. Commit or rollback all changes to an index before alter index convert type is used to change the index type.

System Programmer Response: The alter index convert type of the index is not allowed.

Problem Determination: The requested operation is not performed because the index might be in an inconsistent state. An SQLCODE -904 or message DSNT501I is issued. For more information, refer to the SQL return code in Section 2, SQL Return Codes or to the description of the DSNT501I.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051.

00C900C7

Explanation: The requested function was either:

- not supported by the current release or maintenance level of DB2, or
- deactivated by a modified the system parameters.

In the former case, the NAME field of the accompanying message indicates the required level of maintenance. In the latter case, the NAME field indicates the deactivating system parameter.

System Programmer Response: To permit the use of the function, take the appropriate actions according to the situation. Apply the indicated maintenance, migrate to the indi-
Collect the following diagnostic items listed in Appendix B, the description of the DSNT500I and DSNT501I messages in Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The requested operation is not performed. An SQLCODE -904 is issued. Message DSNT500I or message DSNT501I may also be issued. For more information, refer to the Section 2. SQL Return Codes on page 17 or to the description of the DSNT500I and DSNT501I messages in Section 2. DSNT... Messages on page 315.

Collect the following diagnostic items listed in Appendix B, "Problem determination on page 1051 1, 3, 5, 37.

00C900D1

Explanation: The amount of space allowed for processing LOB values by a user has been exceeded. The amount of space allowed per user is indicated by panel DSNTIP7.

This reason code is issued by the following CSECTs: DSNNOTCSO

System Action: The operation is not allowed. DB2 returns 'resource not available' to its invoker.

System Programmer Response:

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The requested operation is not performed. An SQLCODE -904 is issued. Message DSNT500I or message DSNT501I may also be issued. For more information, refer to the Section 2. SQL Return Codes on page 17 or to the description of the DSNT500I and DSNT501I messages in Section 2. DSNT... Messages on page 315.

Collect the following diagnostic items listed in Appendix B, "Problem determination on page 1051 1, 3, 5, 37.

00C900C8

Explanation: Access to the index is disallowed within the same commit scope as an ALTER TABLE statement that alters the key column in the index. If the ALTER TABLE statement failed, then commit the changes to the index and retry the ALTER TABLE statement. If an INSERT, DELETE, UPDATE, or SELECT statement failed, then commit the ALTER and retry the statement.

System Action: The operation is not allowed.

User Response: Commit and then retry the operation.

00C900C9

Explanation: After being expanded to process triggers, a row has grown too large to fit into a 32K page of a workfile.

System Action: DB2 does not perform the requested operation.

Programmer Response: Drop and recreate triggers to use less LOB columns as transition variables, or eliminate the use of the ROWID column as a transition variable. For a table with LOB columns or a ROWID column whose row size is very close to 32K, it may not be possible to use transition tables with triggers.

Problem Determination: DB2 does not perform the requested operation. DB2 issues SQL code -904, and may also issue message DSNT500I or DSNT501I. For more information, refer to Section 2. SQL Return Codes on page 17 or to the description of the DSNT500I and DSNT501I messages in Section 2. DSNT... Messages on page 315.

Collect the following terms listed in Appendix B, "Problem determination on page 1051 1, 3, 5, 37.

00C900D2

Explanation: The amount of space allowed for processing LOB locators for a system has been exceeded. The amount of space allowed for a system is indicated by panel DSNTIP7.

This reason code is issued by the following CSECTs: DSNNOTCSO

System Action: The operation is not allowed. DB2 returns 'resource not available' to its invoker.

System Programmer Response:

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The requested operation is not performed. An SQLCODE -904 is issued. Message DSNT500I or message DSNT501I may also be issued. For more information, refer to the Section 2. SQL Return Codes on page 17 or to the description of the DSNT500I and DSNT501I messages in Section 2. DSNT... Messages on page 315.

Collect the following diagnostic items listed in Appendix B, "Problem determination on page 1051 1, 3, 5.

00C900D0

Explanation: An attempt was made to access a value in a column with one of the LOB data types (BLOB, CLOB, DBCLOB), but the value of the column is no longer valid.

System Action: The operation is not allowed. DB2 returns 'resource not available' to its invoker.

System Programmer Response: Use the CHECK LOB utility to identify the invalid LOBs. Use update to replace or delete the invalid LOBs.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The requested operation is not performed. An SQLCODE -904 is issued. Message DSNT500I or message DSNT501I may also be issued. For more information, refer to the Section 2. SQL Return Codes on page 17 or to the description of the DSNT500I and DSNT501I messages in Section 2. DSNT... Messages on page 315.

Collect the following diagnostic items listed in Appendix B, "Problem determination on page 1051 1, 3, 5.

00C900D3

Explanation: No more space in the data space is available for processing LOB values.

This reason code is issued by the following CSECTs: DSNNOTCSO

System Action: The operation is not allowed. DB2 returns 'resource not available' to its invoker.

System Programmer Response:

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The requested operation is not performed. An SQLCODE -904 is issued. Message DSNT500I or message DSNT501I may also be issued. For more information, refer to the Section 2. SQL Return Codes on page 17 or to
00C90101

**Explanation:** The data manager detected an internal error within DB2. This error may indicate inconsistent data or an error in internal DB2 control structures or code.

This abend reason code is issued by the following CSECT: DSNNnnnn

‘nnnnn’ is the CSECT name identifier given in VRARRK5 of the VRA in the SDWA (see the Problem Determination section of this message). ‘DSNnnnnn’ is the full CSECT name given in the dump title.

Possible causes of this error include:

- Improper migration or fall back procedures,
- DB2 directory and DB2 Catalog restored to different points in time,
- Table space restored improperly,
- An internal DB2 failure.

**System Action:** A record is written to SYS1.LOGREC, and an SVC dump is requested.

**User Response:** Notify the system programmer.

**Operator Response:** Collect the console output from the system on which the job was run for the period of time spanning the failure. Save this output for use in problem determination.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** If this abend occurred while processing data in one or more pages, message DSNI014I is issued to identify each page involved. In general, the data in these pages is fine. However, if problems are reported that repeatedly involve the same pages or if the same pages are reported by other abends, you may want to analyze the set of pages specified.

Run the CHECK utility to determine the extent of index inconsistency if:

- The page type indicated in message DSNI014I is index.
- The page type indicated in message DSNI014I is data.
- There is an index defined on a table in the indicated page set.

The LOC keyword in the dump title gives the load-module.CSECT.qualifier of the location where the abend occurred. ‘Qualifier’ is a unique, 4-digit hexadecimal number that identifies the place within the source module (CSECT) where the abend was issued.

Refer also to Table 4 in [Appendix B, “Problem determination” on page 1051](#problem-determination-on-page-1051) for further information on DSN1COPY misuse.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this abend code are: VRARRK5, VRARRK6, VRARRK7, VRARRK8, and VRARRK9.

Collect the following diagnostic items listed in [Appendix B, “Problem determination” on page 1051](#problem-determination-on-page-1051) 1, 2, 5, 31, 32, 33, 40, 41.

If the abend reason code was issued by a CSECT with name DSNxxxx, where ‘xxxx’ is any value, make a copy of DSNDB01.DBD01, DSNDB01.SCT02, and DSNDB01.DSNSC020 on tape with DSN1COPY. This might be a large copy.

00C90102

**Explanation:** An inconsistent page was detected. This has been caused by a DB2 internal error.

This abend reason code is issued by the following CSECT: DSNIABROK

**System Action:** A record is written to SYS1.LOGREC, and an SVC dump is requested.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this code are: VRARRK5, VRARRK6, VRARRK7, VRARRK8, and VRARRK9.

In addition, the following general purpose registers (GPRs) contain the indicated diagnostic information:

**GPR**

<table>
<thead>
<tr>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>8</td>
</tr>
<tr>
<td>9</td>
</tr>
</tbody>
</table>

Collect the following diagnostic items listed in [Appendix B, “Problem determination” on page 1051](#problem-determination-on-page-1051) 1, 2, 5, 6, 13, 32.

00C90103

**Explanation:** Bad data was returned from either the edit or the validation exit.

This abend reason code is issued by the following CSECTs: DSN1REDR, DSN1ENS

**System Action:** A record is written to SYS1.LOGREC, and an SVC dump is requested.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** SYS1.LOGREC contains the same diagnostic information in the variable recording area (VRA) as in the abend reason code ‘00C90101’. Refer to the table accompanying that abend reason code for details.

The ‘00C90103’ abend reason code was issued because one of the checks described in the following list failed:

- Save first and last byte of the input record. On return from exit, see if either group has been modified. If so, abend.
- Check length of edited data. If greater than maximum allowed for this row, or less than one, abend.
- Store a special character in the first byte past the end of the output area (place for edit procedure to put edited or (original unedited) row), to make sure the exit doesn’t overrun this area. On return, check if it is still the same special character. If not, abend.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this code are: VRARRK5, VRARRK6, VRARRK7, VRARRK8, and VRARRK9.
Collect the following diagnostic items listed in Appendix B, on page 1051 for further information on DSN1COPY misuse. Refer also to Table 4 in Appendix B, for information on identifying and reporting the problem.

**System Programmer Response:** Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this code are: VRARRK5, VRARRK6, VRARRK7, VRARRK8, and VRARRK9. Exceptions to the table definitions of the VRA fields are:

- VRARRK5 is the name of the module that called the check page routine that detected the error in the page.
- VRARRK6 identifies the error in the page.

The following general purpose registers (GPRs) contain the indicated diagnostic information:

<table>
<thead>
<tr>
<th>GPR</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Address of the page set block (PB)</td>
</tr>
<tr>
<td>3</td>
<td>Address of the log record, if any</td>
</tr>
<tr>
<td>8</td>
<td>Address of the buffer block (BB)</td>
</tr>
<tr>
<td>9</td>
<td>Address of the page buffer</td>
</tr>
</tbody>
</table>

Refer also to Table 4 in Appendix B, “Problem determination” on page 1051 for further information on DSN1COPY misuse.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2, 5, 6, 13, 32.

**00C90106**

**Explanation:** The entry is not found for a table space that is being set for deferred restart. An error in DB2 logic is probably responsible for this condition.

This abort reason code is issued by the following CSECT: DSNIMPD

**System Action:** A record is written to SYS1.LOGREC, and the thread is terminated.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2, 5, 6, 13, 32.

**00C90107**

**Explanation:** At commit phase 1, a nonzero write intent count was detected. An error in DB2 logic is probably responsible for this condition.

This abort reason code is issued by the following CSECT: DSNICMT2

**System Action:** A record is written to SYS1.LOGREC, and an SVC dump is requested. The thread is aborted.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2, 5, 31, 32, 33.

**00C90108**

**Explanation:** At commit phase 2, a nonzero read intent count or write intent count was detected. An error in DB2 logic is probably responsible for this condition.

This abort reason code is issued by the following CSECT: DSNICMT2

**System Action:** A record is written to SYS1.LOGREC, and a SVC dump is requested. The thread is committed and the application is allowed to continue without notification of the error.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2, 5, 31, 32, 33.

**00C90109**

**Explanation:** At deallocate, a nonzero read intent count or write intent count was detected. An error in DB2 logic is probably responsible for this condition.

This abort reason code is issued by the following CSECT: DSNIDALC

**System Action:** A record is written to SYS1.LOGREC, and a SVC dump is requested. The thread is deallocated normally.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2, 5, 31, 32, 33.

**00C90110**

**Explanation:** The data manager detected an inconsistent data condition. This may be caused by an inconsistency in either the DB2 catalog or the DB2 directory. In this case, the OBD for the requested OBID cannot be located in the database descriptor (DBD). The DBD in storage may be inconsistent. Specifically, the OBDDMAP(OBID) array element should contain an offset into the DBD where the OBID should be located. However, in this case the OBD expected was not at the indicated offset.
The inconsistency may be due to:
- An analysis of the entire DBD must be done.

Since the nature and extent of the damage done to the DBD is not immediately known, an analysis of the entire DBD must be done.

The inconsistency may be due to:
- Incomplete recovery of DB2 catalog and/or DB2 directory.
- Invalid restore of DB2 catalog and/or DB2 directory to a prior point in time.
- A conditional restart which bypassed recovery of either the DSNDB01.DBD01 page set or the DSNDB06.SYSDBASE page set.
- A DB2 internal error.

Collect the following diagnostic items listed in Appendix B.

00C90111

Explanation: The data manager detected an inconsistent data condition. In this case, the OBD for the requested OBID does not exist. This may be caused by an inconsistency in either the DB2 catalog or the DB2 directory. Specifically, the OBDDMAP(OBID) entry is zero rather than an offset to an OBD within the DBD.

To prevent further damage and possible loss of data, the inconsistency must be corrected before any further SQL access is attempted to this database.

System Action: A record is written to SYS1.LOGREC, and an SVC dump is requested.

Operator Response: Notify the system programmer.

System Programmer Response: Determine which databases were being used when the error occurred. Prevent further SQL access to the databases. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Since the extent of this inconsistency is not immediately known, an analysis of the entire DBD must be done.

The inconsistency may be due to:
- Incomplete recovery of the DB2 Catalog and/or the DB2 Directory.
- Invalid restore of the DB2 Catalog and/or the DB2 Directory to a prior point in time.
- A conditional restart which bypassed recovery of DSNDB01.DBD01 or DSNDB06.SYSDBASE page sets.
- A DB2 internal error.

Collect the following diagnostic items listed in Appendix B.

00C90124

Explanation: An attempt was made to apply prior-version/release DB2 log records other than checkpoint records.

System Action: A record is written to SYS1.LOGREC, and an SVC dump is requested.

User Response: Notify the system programmer.

Operator Response: Collect the console output from the system on which the job was run for the period of time spanning the failure. Save this output for use in problem determination.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting problems.

Problem Determination: This abend can occur in migration/remigration when some necessary migration/remigration steps are skipped. It indicates that some DB2 activity occurred or was pending after the last complete checkpoint on the prior system. See Section 2 of DB2 Installation Guide for a complete list of migration/remigration steps. If this was the cause of the problem, it can be corrected by falling back to the prior version/release long enough to bring DB2 up, then bring it down while conforming to all migration/remigration steps. Pay specific attention to resolving all indoubts and to performing a stop mode quiesce.
00C90202

Explanation: The data manager detected an inconsistent data condition. In this case, one of the pointers in a hash chain does not point to a valid child or parent row (that is, the link is ‘broken’). The pointer, the target row, or the page that contains the pointer or target row is in error.

This abend reason code is issued by the following CSECT: DSNnnnnn

‘nnnnn’ is the CSECT name identifier given in VRARRK5 of the VRA in the SDWA (see the Problem Determination section of this message). ‘DSNnnnnn’ is the full CSECT name given in the dump title.

System Action: A record is written to SYS1.LOGREC, and an SVC dump is requested.

User Response: Notify the system programmer.

Operator Response: Collect the console output from the system on which the job was run for the period of time spanning the failure. Save the output for use in problem determination.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Message DSNI013I is issued to identify the data pages. It identifies the database name and table space name. This message is issued for all pages in use at the time of the abend. Within this group of pages, at least one page is involved in the inconsistency. The other pages were present at the time of the abend.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this abend code are: VRARRK5, VRARRK6, VRARRK7, VRARRK8, and VRARRK9.

The LOC keyword in the dump title gives the Load-module.CSECT:qualifier of the location where the abend occurred. ‘Qualifier’ is a unique, 4-digit hexadecimal number that identifies the place within the source module (CSECT) where the abend was issued.

Collect the following diagnostic items listed in Appendix B.

00C90205

Explanation: The data manager detected an inconsistent data condition. In this case, a row obtained from an index entry does not point to a valid row in a data page. The error is probably caused by an extra index entry, but it could also result from a table update not being redone when it should have been.

This abend reason code is issued by the following CSECT: DSNnnnnn

‘nnnnn’ is the CSECT name identifier given in the dump header and appearing in VRARRK5 of the VRA in the SDWA (see the Problem Determination section of this message). ‘DSNnnnnn’ is the full CSECT name given in the dump title.

System Action: A record is written to SYS1.LOGREC, and an SVC dump is requested.

User Response: Notify the system programmer.

Operator Response: Collect the console output from the system on which the job was run for the period of time spanning the failure. Save this output for use in problem determination.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Message DSNI013I is issued to identify the data pages. It identifies the database name and the table space name. This message is issued for all pages in use at the time of the abend. Within this group of pages, at least one page is involved in the inconsistency. The other pages were present at the time of the abend.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this abend code are: VRARRK5, VRARRK6, VRARRK7, VRARRK8, and VRARRK9.

The LOC keyword in the dump title gives the Load-module.CSECT:qualifier of the location where the abend occurred. ‘Qualifier’ is a unique, 4-digit hexadecimal number

00C90203

Explanation: The data manager detected an inconsistent data condition. In this case, one of the pointers in a hash chain does not point to a valid row or anchor (that is, the hash chain is ‘broken’). The pointer, the target row/anchor, or the page that contains the target or anchor row is in error.

This abend reason code is issued by the following CSECT: DSNnnnnn

‘nnnnn’ is the CSECT name identifier given in VRARRK5 of the VRA in the SDWA (see the Problem Determination section of this message). ‘DSNnnnnn’ is the full CSECT name given in the dump title.

System Action: A record is written to SYS1.LOGREC, and an SVC dump is requested.

User Response: Notify the system programmer.

Operator Response: Collect the console output from the system on which the job was run for the period of time spanning the failure. Save this output for use in problem determination.

Problem Determination: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Message DSNI013I is issued to identify the data pages. It identifies the database name and the table space name. This message is issued for all pages in use at the time of the abend. Within this group of pages, at least one page is involved in the inconsistency. The other pages were present at the time of the abend.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this abend code are: VRARRK5, VRARRK6, VRARRK7, VRARRK8, and VRARRK9.

The LOC keyword in the dump title gives the Load-module.CSECT:qualifier of the location where the abend occurred. ‘Qualifier’ is a unique, 4-digit hexadecimal number that identifies the place within the source module (CSECT) where the abend was issued.

Collect the following diagnostic items listed in Appendix B.

Problem determination on page 1051 1, 2, 5, 31, 32, 33, 42.
**Explanation:** The data manager detected an inconsistent data condition. In this case, a pointer record does not point to a valid overflow record. The pointer record, the overflow record, or the page that contains the pointer or overflow record is in error.

This abend reason code is issued by the following CSECT: DSNnnnnn

'nnnnn' is the CSECT name identifier given in the dump header and appearing in VRARRK5 of the VRA in the SDWA (see the Problem Determination section of this message).

'SDSnnnnn' is the full CSECT name given in the dump title.

**System Action:** A record is written to SYS1.LOGREC, and an SVC dump is requested.

**User Response:** Notify the system programmer.

**Operator Response:** Collect the console output from the system on which the job was run for the period of time spanning the failure. Save this output for use in problem determination.

**System Programmer Response:** If you suspect an error in DB2, for information on identifying and reporting the problem.

**Problem Determination:** Message DSN013I is issued to identify the data pages. It also identifies the database name and the table space name. This message is issued for all pages in use at the time of the abend. Within this group of pages, at least one page is involved in the inconsistency. The other pages were present at the time of the abend.

The LOC keyword in the dump title gives the Load-module.CSECT: qualifier of the location where the abend occurred. 'Qualifier' is a unique, 4-digit hexadecimal number that identifies the place within the source module (CSECT) where the abend was issued.

**Problem Determination:** Refer also to Appendix B, "Page determination" on page 1051 for further information on DSN1COPY misuse.

**System Programmer Response:** Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Problem Determination: Message DSN013I is issued to identify the index page. It also identifies the database name and index space name. This message is issued for all pages in use at the time of the abend. Within this group of pages, at least one page is involved in the inconsistency. The other pages were present at the time of the abend.

The LOC keyword in the dump title gives the Load module.CSECT-qualifier of the location where the abend occurred. ‘Qualifier’ is a unique, 4-digit hexadecimal number that identifies the place within the source module (CSECT) where the abend was issued. 

Refer also to Appendix B, "Problem determination" on page 1051 Table 4 for further information on DSN1COPY misuse.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this abend code are: VRARRK5, VRARRK6, VRARRK7, VRARRK8, and VRARRK9.

Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051: 1, 2, 5, 31, 32, 33, 41, 43.

00C90211

Explanation: The data manager detected an inconsistent data condition. In this case, a row is missing a column that is not nullable and does not allow default values.

This abend reason code is issued by the following CSECT: DSNnnnnn

‘nnnnn’ is the CSECT name identifier given in the dump header and appearing in VRARRK5 of the VRA in the SDWA (see the Problem Determination section of this message).

‘DSNnnnnn’ is the full CSECT name given in the dump title.

System Action: A record is written to SYS1.LOGREC, and an SVC dump is requested.

User Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Message DSN013I is issued to identify the index page. It also identifies the database name and index space name. This message is issued for all pages in use at the time of the abend. Within this group of pages, at least one page is involved in the inconsistency. The other pages were present at the time of the abend.

The LOC keyword in the dump title gives the Load module.CSECT-qualifier of the location where the abend occurred. ‘Qualifier’ is a unique, 4-digit hexadecimal number that identifies the place within the source module (CSECT) where the abend was issued.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this abend code are: VRARRK5, VRARRK6, VRARRK7, VRARRK8, and VRARRK9.

Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051: 1, 2, 5, 31, 32, 33, 41, 43.

00C90212

Explanation: The data manager detected an inconsistent data condition. In this case, there is an empty index leaf page other than the root. (DB2 removes empty pages from the index tree.)

This abend reason code is issued by the following CSECT: DSNnnnnn

‘nnnnn’ is the CSECT name identifier given in the dump header and appearing in VRARRK5 of the VRA in the SDWA (see the Problem Determination section of this message).

‘DSNnnnnn’ is the full CSECT name given in the dump title.

System Action: A record is written to SYS1.LOGREC, and an SVC dump is requested.

User Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Message DSN013I is issued to identify the index page. It also identifies the database name and index space name. This message is issued for all pages in use at the time of the abend. Within this group of pages, at least one page is involved in the inconsistency. The other pages were present at the time of the abend.

Run the CHECK utility to determine the extent of index inconsistency if:

- The page type indicated in message DSN014I is index.
- The page type indicated in message DSN014I is data.
- There is an index defined on a table in the indicated page set.

The LOC keyword in the dump title gives the Load module.CSECT-qualifier of the location where the abend occurred. ‘Qualifier’ is a unique, 4-digit hexadecimal number that identifies the place within the source module (CSECT) where the abend was issued.

Refer also to Appendix B. "Problem determination" on page 1051 Table 4 for further information on DSN1COPY misuse.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this abend code are: VRARRK5, VRARRK6, VRARRK7, VRARRK8, and VRARRK9.

Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051: 1, 2, 5, 31, 32, 33, 41, 43.

00C90213

Explanation: The data manager detected an inconsistent data condition. In this case, a row has an unexpected OBID stored in its prefix. A possible cause is that the table space was restored (via DSN1COPY or similar tool) improperly. For example, the wrong data set was copied for the given table space.

This abend reason code is issued by the following CSECT: DSNnnnnn

‘nnnnn’ is the CSECT name identifier given in the dump header and appearing in VRARRK5 of the VRA in the SDWA (see the Problem Determination section of this message).

‘DSNnnnnn’ is the full CSECT name given in the dump title.
System Action: A record is written to SYS1.LOGREC, and an SVC dump is requested.

User Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Message DSNI013I is issued to identify the data page. It also identifies the database name and table space name. This message is issued for all pages in use at the time of the abend. Within this group of pages, at least one page is involved in the inconsistency. The other pages were present at the time of the abend.

The LOC keyword in the dump title gives the Load-module.CSECT: qualifier of the location where the abend occurred. ‘Qualifier’ is a unique, 4-digit hexadecimal number that identifies the place within the source module (CSECT) where the abend was issued.

Refer also to Table 4 in Appendix B, “Problem determination” on page 1051 for further information on DSN1COPY misuse.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this abend code are: VRARRK5, VRARRK6, VRARRK7, VRARRK8, and VRARRK9.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

00C90214

Explanation: The data manager detected a condition of inconsistent data. The index manager subcomponent has been passed a key with a key length not equal to the key length in pages of the index. The index space may have been improperly restored by using DSN1COPY or the wrong data set may have been copied for the given index.

This abend reason code is issued by the following CSECT: DSNnnnnn

‘nnnnn’ is the CSECT name identifier given in VRARRK5 of the VRA in the SDWA. ‘DSNnnnnn’ is the full CSECT name given in the dump title.

System Action: A record is written to SYS1.LOGREC, and an SVC dump is requested.

User Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

A rebuild index or recover index will restore the index to a correct condition.

Problem Determination: Message DSNI013I will be issued for each index page. It identifies the database, the index name. This message is issued for all pages in use at the time of the abend. Within this group of pages, at least one page is involved in the inconsistency. The other pages were present at the time of the abend.

The LOC keyword in the dump title gives the Load-module.CSECT: qualifier of the location where the abend occurred. ‘Qualifier’ is a unique, 4-digit hexadecimal number that identifies the place within the source module (CSECT) where the abend was issued.

Refer also to Table 4 in Appendix B, “Problem determination” on page 1051 for further information on DSN1COPY misuse.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this abend code are: VRARRK5, VRARRK6, VRARRK7, VRARRK8, and VRARRK9.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.
**00C90216**

**Explanation:** The data manager has detected an inconsistent data condition. Either the length of a record in a table space is longer than the maximum-defined record length as defined in the DB2 directory or a variable-length column has a longer length than the length defined in the DB2 directory.

This abend reason code is issued by the following CSECTs:

DSNIOSET  DSNIRNXT  DSNIRSET  DSNISFWL

**System Action:** A record is written to SYS1.LOGREC, and an SVC dump is requested.

**User Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** Message DSNI013I is issued to identify the data page that contains the record that is longer than allowed by its corresponding record definition. This could occur if the DB2 directory was recovered to a previous point, allowing new object creations (with a shorter record length) to be created having record identifiers identical to objects previously created in the table space. Also the table space may have been improperly restored by using DSN1COPY or the wrong data set may have been copied for the given table space.

Refer also to Table 4 in Appendix B, "Problem determination" on page 1051 for further information on DSN1COPY misuse.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 2, 5, 32, 37, 65, 66.

**00C90218**

**Explanation:** The data manager detected an inconsistent data condition in a segmented table space. In this case, an unallocated segment was found on a segment chain.

This abend reason code is issued by the following CSECT: DSNnnnnn

The CSECT name identifier given in the dump header and appearing in VRARRK5 of the VRA in the SDWA is ‘nnnnn’ (see the Problem Determination section of this message). The full CSECT name given in the dump title is ‘DSNnnnnn’.

**System Action:** A record is written to SYS1.LOGREC and an SVC dump is requested.

**User Response:** Notify the system programmer.

**Operator Response:** Collect the console output from the system on which the job was run for the period of time spanning the failure. Save this output for use in problem determination.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** Message DSNI013I is issued to identify the space map page that contains the bad segment entry. The database name and table space name will also be identified.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this abend code are: VRARRK5, VRARRK6, VRARRK7, VRARRK8, and VRARRK9.

Refer also to Table 4 in Appendix B, "Problem determination" on page 1051 for further information on DSN1COPY misuse.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 3, 32, 37.

**00C90219**

**Explanation:** The data manager detected an inconsistent data condition in a segmented table space. In this case, an allocated segment was found on a wrong segment chain (that is, a segment chain contains a segment that belongs to a different table).

This abend reason code is issued by the following CSECT: DSNnnnnn

The CSECT name identifier given in the dump header and appearing in VRARRK5 of the VRA in the SDWA is ‘nnnnn’ (see the Problem Determination section of this message). The full CSECT name given in the dump title is ‘DSNnnnnn’.

**System Action:** A record is written to SYS1.LOGREC and an SVC dump is requested.

**User Response:** Notify the system programmer.

**Operator Response:** Collect the console output from the system on which the job was run for the period of time spanning the failure. Save this output for use in problem determination.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** Message DSNI013I is issued to identify the space map page that contains the bad segment entry. The database name and table space name will also be identified.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this abend code are: VRARRK5, VRARRK6, VRARRK7, VRARRK8, and VRARRK9.

Refer also to Table 4 in Appendix B, "Problem determination" on page 1051 for further information on DSN1COPY misuse.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 3, 32, 37.

**00C9021A**

**Explanation:** The data manager detected an inconsistent data condition in a segmented table space. In this case, a data page contains a record which belongs to a table that has not been allocated for the page.

This abend reason code is issued by the following CSECT: DSNnnnnn

The CSECT name identifier given in the dump header and appearing in VRARRK5 of the VRA in the SDWA is ‘nnnnn’ (see the Problem Determination section of this message). The full CSECT name given in the dump title is ‘DSNnnnnn’.

**System Action:** A record is written to SYS1.LOGREC, and an SVC dump is requested.

**User Response:** Notify the system programmer.

**Operator Response:** Collect the console output from the system on which the job was run for the period of time span-
Collect the following diagnostic items listed in Appendix B, on page 1051 for further information on DSN1COPY misuse. Refer also to Table 4 in Appendix B, VRARRK7, VRARRK8, and VRARRK9.

significant fields for this abend code are: VRARRK5, VRARRK6, VRARRK7, VRARRK8, and VRARRK9.

Refer also to Table 4 in Appendix B, "Problem determination" on page 1051 for further information on DSN1COPY misuse.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 3, 32, 37.

00C9021B

Explanation: The data manager detected an inconsistent data condition in a segmented table space. In this case, the space map page indicates a data page that is not empty exists. However, the data page is either not formatted by the data manager or it is beyond the highest VSAM formatted area.

This abend reason code is issued by the following CSECT: DSNnnnnn

The CSECT name identifier given in the dump header and appearing in VRARRK5 of the VRA in the SDWA is 'nnnn' (see the Problem Determination section of this message). The full CSECT name given in the dump title is 'DSNnnnnn'.

System Action: A record is written to SYS1.LOGREC and an SVC dump is requested.

User Response: Notify the system programmer.

Operator Response: Collect the console output from the system on which the job was run for the period of time spanning the failure. Save this output for use in problem determination.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Message DSNI013I is issued to identify the inconsistent data page and its covering space map page. The database name and table space name will also be identified.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this abend code are: VRARRK5, VRARRK6, VRARRK7, VRARRK8, and VRARRK9.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 3, 32, 37.

00C9021C

Explanation: While running a utility, the data manager detected an inconsistent data condition. A row was encountered that is not represented by a record OBD in the database descriptor (DBD). This abend may indicate an internal DB2 error, but most likely occurs due to a user error. Possible user errors may include:

- Data from a DB2 subsystem was copied to another DB2 subsystem incorrectly. This is the most common error.
- DSNDDB01.DBD01 was regressed to a time prior to a table being created.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

This abend reason code is issued by the following CSECTs: DSNIRFNX, DSNISNPG

System Action: A record is written to SYS1.LOGREC and an SVC dump is requested. The dump is required in the event that the problem is determined to be a DB2 internal error.

User Response: Notify the system programmer.

System Programmer Response: Determine if improper procedures were used to restore the table space or DBD that would lead to the inconsistency.

Problem Determination: Message DSNI013I will be issued.

If a DB2 internal error is indicated, collect the following diagnostic items:

- DSN1COPY of the user table space.
- DSN1COPY of DSNDDB01.DBD01.

Also collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 5, 31, 32, 33, 37.

00C9021D

Explanation: During a LOAD/REORG utility or termination of a utility, the data manager detected an inconsistent data condition. A space map page was missing from the table space. This abend may indicate an internal DB2 error (caused by the utilities subcomponent passing a bad start position to the data manager), but most likely occurs due to a user error. Possible causes are that the table space data set has been deleted and redefined without DB2's knowledge, or that the table space was incorrectly restored from an improper DSN1COPY of the table space.

This abend reason code is issued by the following CSECT: DSNIDLOD

System Action: A record is written to SYS1.LOGREC, and an SVC dump is requested. The dump is required in the event that the problem is determined to be a DB2 internal error.

User Response: Notify the system programmer.

System Programmer Response: Determine if the data set was improperly restored or deleted and redefined by the user. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Message DSNI013I will be issued. If the message information describes page 'xx0001'X of the table space, this indicates that the data set was deleted and redefined without DB2's knowledge.
If a DB2 internal error is indicated, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 5, 10, 12, 31, 32, 33, 37, 43.

00C9021E
Explanation: The data manager detected an inconsistent data condition in a segmented table space. An invalid page was requested. The page number is outside the highest formatted RBA for the page set. Either the segment chain is broken, or the table space has been truncated. A truncated table space could be a possible user error.

This abend reason code is issued by the following CSECTs: DSNISGSC, DSNISNP.

System Action: A record is written to SYS1.LOGREC, and an SVC dump is requested.

User Response: Notify the system programmer.

Operator Response: Collect the console output from the system on which the job was run for the period of time spanning the failure. Save this output for use in problem determination.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 5, 32, 37.

00C9021F
Explanation: The data manager detected an inconsistent data condition in a segmented table space. A duplicate first segment block for a table is found during the rebuilding of the first segment block in a segmented table space. The segment chain may be broken.

This abend reason code is issued by the following CSECT: DSNISEGR.

System Action: A record is written to SYS1.LOGREC, and an SVC dump is requested.

User Response: Notify the system programmer.

Operator Response: Collect the console output from the system on which the job was run for the period of time spanning the failure. Save this output for use in problem determination.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items:

- Console output from the system on which the job was run and a listing of SYSLOG data set for the period of time spanning the failure.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as a result of operator initiated dump command or SLIP trap exit.
- SYSPRINT output, including JCL, for the batch job and system messages that were issued.
- Definitions of table spaces, tables, and indexes involved in the error.
- Listing of the entire table space.
- Listing of the DBD, obtained by executing UTILITY DIAGNOSE OBD.

00C90220
Explanation: The data manager detected an inconsistent data condition. In this case, free index page cannot be found in the index space. The problem could be caused by a problem detected by IRLM, such as out-of-storage, or some other problem.

This abend reason code is issued by the following CSECT: DSNISMXF.

System Action: A record is written to SYS1.LOGREC, and an SVC dump is requested.

User Response: Notify the system programmer.

Operator Response: Collect the console output from the system on which the job was run for the period of time spanning the failure. Save this output for use in problem determination.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Message DSNI013I is issued to identify the data pages. It identifies the database name, table space name, and index space name. This message is issued for all pages in use at the time of the abend. Within this group of pages, at least one page is involved in the inconsistency. The other pages were present at the time of the abend.

From the console output, determine if resource unavailable message DSNT500I/DSNT501I was given prior to the abend. If there is and the reason code given is 00C90092, 00C90093, or 00C90096, then refer to the description of the appropriate message in this book for more information. Otherwise, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 5, 31, 32, 33. Also collect a DSN1COPY output of the tables and indexes before any recover is performed.

00C90221
Explanation: The data manager detected an inconsistent data condition. In this case, a nonsegmented space map page was read for a table space that had been defined as segmented. This problem could be caused by incorrect use of the DSN1COPY service aid or a DB2 internal problem reading the space map page.

This abend reason code is issued by the following CSECT: DSNISGAU.

System Action: A record is written to SYS1.LOGREC, and an SVC dump is requested.

User Response: Notify the system programmer.

Operator Response: Collect the console output from the system on which the job was run for the period of time spanning the failure. Save this output for use in problem determination.

System Programmer Response: If you suspect an error in DB2, Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Problem Determination:  SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this abend code are: VRARRK5, VRARRK6, VRARRK7, VRARRK8, and VRARRK9.

Refer also to Table 4 in Appendix B, "Problem determination" on page 1051 for further information on DSN1COPY misuse. Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 2, 32, 37.

00C90222

Explanation:  While starting DB2, the data manager detected a utility in process (UTUT, UTRO or UTRW) state on an object that originated from Version 2 Release 3. This abend might indicate an internal DB2 error, but most likely occurs because of a user error. A possible user error is a result of not terminating all utilities before migrating to this release.

This abend reason code is issued by the following CSECT: DSNIERST

System Action:  The -START DB2 command fails. A record is written to SYS1.LOGREC and an SVC dump is requested. The dump is required if the problem is determined to be a DB2 internal error.

User Response:  Notify the system programmer.

System Programmer Response:  Determine if an improper procedure was used to migrate to this release. If the utilities were not terminated before migrating, fall back to Version 2 Release 3 and restart DB2. Use the -TERM UTILITY command to terminate utilities, use the -DISPLAY UTILITY command to make sure no utility job is currently active, stop DB2, and remigrate to this release.

Problem Determination:  Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 2, 5, 31, 33.

00C90301

Explanation:  The data manager detected an internal error with DB2 during RID LIST processing. The requested RIDMAP pointer can not be found in the specified CUB control block.

This abend reason code is issued by the following CSECTs: DSNICMT2 DSNIRIDR DSNICTCUS DSNXRFCX DSNXRRLD DSNXSRDFN DSNXRSGB DSNXRTUL DSNXSMIN DSNXSMLR DSNXSMUN DSNXSRID

System Action:  A record is written to SYS1.LOGREC and an SVC dump is requested.

User Response:  Notify the system programmer.

Operator Response:  Collect the console output from the system on which the job was run from the period of time spanning the failure. Save this output for use in problem determination.

System Programmer Response:  Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination:  Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 2, 5, 32, 37.

00C90303

Explanation:  An attempt to make the database exception table (DBET) consistent failed after an agent failure.

System Action:  The DB2 subsystem abends, a record is written to SYS1.LOGREC, and an SVC dump is requested.

Problem Determination:  This reason code is issued by the following CSECT: DSNIDBPX

Restarting the member rebuilds the local DBET. Analyze SYS1.LOGREC and the dump to determine why the agent failed and why the attempt to make the DBET consistent failed.

00C90304

Explanation:  START DATABASE recovery of GRECP cannot proceed because the recover base RBA value in the header page for the object is invalid. The following might have occurred:

- The data set was restored from an earlier release backup that does not have a starting RBA or LRSN in the header page.
- DSN1COPY RESET utility command.

System Action:  The GRECP recovery for this object is terminated; all other objects being recovered by this START DATABASE command are not affected.

System Programmer Response:  Use the RECOVER utility without the LOGONLY option.

Problem Determination:  If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 2, 5.

This abend reason code is issued by the following CSECT: DSNISREC

00C90D01

Explanation:  DB2 detected an inconsistent condition. An entry in the auxiliary index was not found. The error is probably caused by not recovering all table spaces in a table space set to the same point-in-time.

This abend reason code is issued by the following CSECTs: DSNONLLE and DSNOTCSO

System Action:  A record is written to SYS1.LOGREC and an SVC dump is requested.

System Programmer Response:  If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination:  Message DSN1031I is issued to identify the index page. Run CHECK INDEX on the auxiliary index followed by CHECK DATA on the base table space in order to identify the inconsistencies. See DB2 Utility Guide and Reference for information about CHECK INDEX and CHECK DATA.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 3, 5.
X'D1......' Codes

For X'D1' codes, DB2 provides the following diagnostic information in the SYS1.LOGREC variable recording area (VRA) of the SDWA for many of the reason codes:

<table>
<thead>
<tr>
<th>MODID</th>
<th>Name of module issuing the abend</th>
</tr>
</thead>
<tbody>
<tr>
<td>LEVEL</td>
<td>Change level</td>
</tr>
<tr>
<td>COMPONENT</td>
<td>Subcomponent ID</td>
</tr>
<tr>
<td>REGISTERS</td>
<td>General purpose registers (GPRs) 0 through 15 at time of abend</td>
</tr>
</tbody>
</table>

**00D10010**

**Explanation:** The DB2 stand-alone log services OPEN processing macro (DSNJSLR) issues this reason code. The RANGE parameter on the OPEN request specifies the address of a 12-byte area containing the log relative byte address (RBA) range to be processed by subsequent GET requests. However, the RBA specified in the second six bytes of the RANGE parameter (which indicates the end of the log RBA) is less than or equal to the RBA specified in the first six bytes of the RANGE parameter (which indicates the start of the log RBA).

This reason code is issued by the following CSECT: DSNJRS01

**System Action:** In response to the DSNJSLR FUNC=OPEN call, DB2 places a return code of 8 in register 15 and a reason code of 00D10012 in register 0. No abend is issued by the stand-alone log services CSECT (DSNJRS01), and no information is written to SYS1.LOGREC data set.

The stand-alone log services program is under the control of a user-written program that uses the DSNJSLR macro. The user program must therefore anticipate and react to a nonzero return code and a nonzero reason code, possibly by terminating the execution of the user program.

For additional details about the stand-alone log services, including a sample of an application program which reacts to nonzero return codes and nonzero reason codes, refer to Appendix C (Volume 2) of DB2 Administration Guide.

**System Programmer Response:** In all likelihood, the REGION parameter on the EXEC statement for the user program is too small. Increase the REGION size, and resubmit the user program.

**00D10012**

**Explanation:** The DB2 stand-alone log services OPEN processing macro (DSNJSLR) issued this reason code. The Job Control Language (JCL) for the user program that uses the DSNJSLR macro must specify either the use of the bootstrap data set (BSDS) or, in the absence of the BSDS, the active or archive data set(s) which is used in the processing. The FUNC=OPEN request failed because neither BSDS nor any log data set is allocated for the job.

This reason code is issued by the following CSECT: DSNJRS01

**System Action:** In response to the DSNJSLR FUNC=OPEN call, DB2 places a return code of 8 in register 15 and a reason code of 00D10013 in register 0. No abend is issued by the stand-alone log services CSECT (DSNJRS01), and no information is written to SYS1.LOGREC data set.

The stand-alone log services program is under the control of a user-written program that uses the DSNJSLR macro. The user program must therefore anticipate and react to a nonzero return code and a nonzero reason code, possibly by terminating the execution of the user program.

For additional details about the stand-alone log services, including a sample of an application program which reacts to nonzero return codes and nonzero reason codes, refer to Appendix C (Volume 2) of DB2 Administration Guide.

**System Programmer Response:** In all likelihood, the REGION parameter on the EXEC statement for the user program is too small. Increase the REGION size, and resubmit the user program.

**00D10011**

**Explanation:** The DB2 stand-alone log services OPEN and GET processing macro (DSNJSLR) issued this reason code. During the initial processing of a FUNC=OPEN or FUNC=GET request, storage is obtained to contain the control blocks and other information required to process this request. An MVS GETMAIN failed when attempting to obtain the required storage.

This reason code is issued by the following CSECTs: DSNJRS01 DSNJRS03 DSNJRS04

**System Action:** In response to the DSNJSLR FUNC=OPEN or FUNC=GET call, DB2 places a return code of 8 in register 15 and a reason code of 00D10011 in register 0. No abend is issued by the stand-alone log services CSECT (DSNJRS01), and no information is written to SYS1.LOGREC data set.

The stand-alone log services program is under the control of a user-written program that uses the DSNJSLR macro. The user program must therefore anticipate and react to a nonzero return code and a nonzero reason code, possibly by terminating the execution of the user program.

For additional details about the stand-alone log services, including a sample of an application program which reacts to nonzero return codes and nonzero reason codes, refer to Appendix C (Volume 2) of DB2 Administration Guide.

**System Programmer Response:** Correct the JCL and resubmit the user program.

**00D10013**

**Explanation:** The DB2 stand-alone log services OPEN processing macro (DSNJSLR) issued this reason code. A VSAM OPEN error occurred while opening the bootstrap data set (BSDS).

This reason code is issued by the following CSECT: DSNJRS04

**System Action:** In response to the DSNJSLR FUNC=OPEN call, DB2 places a return code of 12 in register 15 and a reason code of 00D10013 in register 0. No abend is issued by
the stand-alone log services CSECT (DSNJRS01), and no information is written to SYS1.LOGREC data set.

Information about the results of the OPEN request is also returned in the stand-alone log GET Feedback Area (SLRF). The VSAM OPEN error return code is placed in SLRFGR15. The ACB error code (ACBERFLG) is placed in SLRFERCDC.

The stand-alone log services program is under the control of a user-written program that uses the DSNJSLR macro. The user program must therefore anticipate and react to a nonzero return code and a nonzero reason code, possibly by terminating the execution of the user program.

For additional details about the stand-alone log services, including a sample of an application program which reacts to nonzero return codes and nonzero reason codes, refer to Appendix C (Volume 2) of DB2 Administration Guide.

System Programmer Response: Refer to the DFSMS/MVS: Macro Instructions for Data Sets to determine the meaning of the VSAM OPEN error returned in SLRFGR15, and the ACB error code returned in SLRFERCDC. Take appropriate action, and resubmit the FUNC=OPEN request.

Explanation: The DB2 stand-alone log services OPEN processing macro (DSNJSLR) issued this reason code. The Job Control Language (JCL) associated with the user-written application determines how access to the DB2 log data is achieved. Access can either be through the bootstrap data set (BSDS), or through the explicit inclusion of ddnames in the JCL for the active or archive log data set(s) which are to be examined. If the BSDS method is used, the user must specify a RANGE parameter on the FUNC=OPEN call. This reason code indicates that the user used the BSDS method, but did not specify the range of RBAs to be examined.

This reason code is issued by the following CSECT: DSNJRS01

System Action: In response to DSNJSLR FUNC=OPEN call, DB2 places a return code of 8 in register 15 and a reason code of 00D10014 in register 0. No abend is issued by the stand-alone log services CSECT (DSNJRS01), and no information is written to SYS1.LOGREC data set.

The stand-alone log services program is under the control of a user-written program that uses the DSNJSLR macro. The user program must therefore anticipate and react to a nonzero return code and a nonzero reason code, possibly by terminating the execution of the user program.

For additional details about the stand-alone log services, including a sample of an application program which reacts to the nonzero return codes and nonzero reason codes, refer to Appendix C (Volume 2) of DB2 Administration Guide.

System Programmer Response: Determine the BSDS release level by running the print log map (DSNJU004) utility and then run the appropriate BSDS MIGRATION/FALLBACK program to reformat the bootstrap data set.

- If the release level of the BSDS data set is at 2.2 and below, then run the BSDS conversion program (DSNJMIG0) to migrate forward to the 2.3 and above release level.
- If the release level of the BSDS data set is at 2.3 and above, then run the BSDS conversion program (DSNJFAL0) to fall back to the 2.2 and below release level.

When the BSDS data set has been converted to the new format, rerun the original application program.

Explanation: The DB2 stand-alone log services OPEN processing macro (DSNJSLR) issued this reason code. In the job control language (JCL) associated with the user-written application, MxxARCHV and/or MxxACTn DD statements were specified for a DB2 member while MxxBSDS was also specified for the same member. However, the specification of MxxARCHV and MxxACTn DD statements is mutually exclusive with the specification of MxxBSDS DD statement for the same member.

This reason code is issued by the following CSECT: DSNJRS06

System Action: In response to DSNJSLR FUNC=OPEN call, DB2 places a return code of 12 in register 15 and a reason code of 00D10016 in register 0. No abend is issued by the stand-alone log services, and no information is written to SYS1.LOGREC data set.

User Response: Correct the JCL and rerun the job. Specify either the DD statements for the log data sets (MxxARCHV and MxxACTn) or the DD statement for the BSDS (MxxBSDS) for a given member; do not specify both.
For additional details about the stand-alone log services, including a sample of an application program that reacts to the nonzero return codes and nonzero reason codes, refer to Appendix C (Volume 2) of *DB2 Administration Guide*.

**00D10017**

**Explanation:** The DB2 stand-alone log services OPEN processing macro (DSNJSLR) issued this reason code. The job control language (JCL) associated with the user-written application indicated that the logs from more than one DB2 member were to be read in CI mode. However, CI mode is allowed only when reading the log of a single DB2 system.

This reason code is issued by the following CSECT: DSNJRSo6

**System Action:** In response to DSNJSLR FUNC=OPEN call, DB2 places a return code of 12 in register 15 and a reason code of 00D10017 in register 0. No abend is issued by the stand-alone log services, and no information is written to SYS1.LOGREC data set.

**User Response:**

Either remove the CI mode from the OPEN request to read log records of more than one member or change the JCL to specify only one system's log to read its log in CI mode.

For additional details about the stand-alone log services, including a sample of an application program that reacts to the nonzero return codes and nonzero reason codes, refer to Appendix C (Volume 2) of *DB2 Administration Guide*.

**00D10018**

**Explanation:** The DB2 stand-alone log services OPEN processing macro (DSNJSLR) issued this reason code. In the job control language (JCL) associated with the user-written application, more than one DB2 system's logs were identified. However, on the OPEN request an RBA range was specified. When reading logs from more than one DB2 system, you cannot specify an RBA range; you must specify an LRSN range.

This reason code is issued by the following CSECT: DSNJRSo6

**System Action:** In response to DSNJSLR FUNC=OPEN call, DB2 places a return code of 12 in register 15 and a reason code of 00D10018 in register 0. No abend is issued by the stand-alone log services, and no information is written to SYS1.LOGREC data set.

**User Response:** Correct the range specification on the OPEN request, and rerun the job. If range is specified when reading log records from multiple members, LRSN=YES must also be specified. Also range must be specified if GROUP DD or a MxxBSDS (BSDS) DD is specified in the JCL.

For additional details about the stand-alone log services, including a sample of an application program which reacts to the nonzero return codes and nonzero reason codes, refer to Appendix C (Volume 2) of *DB2 Administration Guide*.

**00D10019**

**Explanation:** The DB2 stand-alone log services OPEN processing macro (DSNJSLR) issued this reason code. A VSAM OPEN error occurred while opening the bootstrap data set (BSDS). The error was determined to be one which could be corrected by use of an AMS VERIFY, but the VERIFY also failed.

This reason code is issued by the following CSECT: DSNJRSo4

**System Action:** In response to the DSNJSLR FUNC=OPEN call, DB2 places a return code of 12 in register 15 and a reason code of 00D10019 in register 0. No abend is issued by the stand-alone log services CSECT (DSNJRS01), and no information is written to SYS1.LOGREC data set.

Information about the results of the OPEN request is also returned in the stand-alone log GET Feedback Area (SLRF).

The VSAM return code from the original VSAM OPEN error is placed in SLRFGR15. The ACB error code (ACBERFLG) from the ACB used in the original VSAM OPEN operation is placed in SLRFERCD.

The stand-alone log services program is under the control of a user-written program that uses the DSNJSLR macro. The user program must therefore anticipate and react to a nonzero return code and a nonzero reason code, possibly by terminating the execution of the user program.

For additional details about the stand-alone log services, including a sample of an application program which reacts to the nonzero return codes and nonzero reason codes, refer to Appendix C (Volume 2) of *DB2 Administration Guide*.

**00D10020**

**Explanation:** The DB2 stand-alone log services GET processing macro (DSNJSLR) issued this reason code. The end of data has been reached (end of the log, end of the user-specified log data set(s), or end of the log RBA range specified by the RANGE parameter).

This reason code is issued by the following CSECTs: DSNJRSo2, DSNJRSo3

**System Action:** In response to the DSNJSLR FUNC=GET call, DB2 places a return code of 4 in register 15 and a reason code of 00D10020 in register 0. No abend is issued by the stand-alone log services CSECT (DSNJRS01), and no information is written to SYS1.LOGREC data set.

The stand-alone log services program is under the control of a user-written program that uses the DSNJSLR macro. The user program must therefore anticipate and react to a nonzero return code and a nonzero reason code, possibly by terminating the execution of the user program.

For additional details about the stand-alone log services, including a sample of an application program which reacts to the nonzero return codes and nonzero reason codes, refer to Appendix C (Volume 2) of *DB2 Administration Guide*.

**System Programmer Response:** This is not an error; rather, this reason code denotes a normal end of data condition. No action is necessary.
00D10021

Explanation: The DB2 stand-alone log services GET processing macro (DSNJSLR) issued this reason code. A gap in the log RBA range has been encountered when switching log data sets, indicating missing log records.

This condition may or may not be intentional on the part of the user. Normally, a continuous set of log records are supplied as input by the ACTIVEn and ARCHIVE ddnames in the user’s JCL. If a log data set was intentionally (or unintentionally) removed, this condition will arise.

This reason code is issued by the following CSECT: DSNJRSo2

System Action: In response to the DSNJSLR FUNC=GET call, DB2 places a return code of 4 in register 15 and a reason code of 00D10022 in register 0. No abend is issued by the stand-alone log services CSECT (DSNJRS01), and no information is written to SYS1.LOGREC data set.

Information about the results of the GET request is also returned in the stand-alone log GET Feedback Area (SLRF). A pointer to the next log record following the gap is placed in SLRFFRAD.

The stand-alone log services program is under the control of a user-written program that uses the DSNJSLR macro. The user program must therefore anticipate and react to a nonzero return code and a nonzero reason code, possibly by terminating the execution of the user program.

For additional details about the stand-alone log services, including a sample of an application program which reacts to nonzero return codes and nonzero reason codes, refer to Appendix C (Volume 2) of DB2 Administration Guide.

System Programmer Response: As mentioned above, this may or may not be an intentional error. Check the user’s JCL to ensure that a continuous string of log records has been supplied. If the BSDS method is being used, use the print log map (DSNJU004) utility to examine the RBA ranges as recorded in the BSDS, and note any RBA gaps which may have resulted from the deletion of an active log data set or an archive log data set.

If it appears that a log error may have occurred, execute the log print utility (DSN1LOGP) to attempt to obtain a detailed report of the log record(s) associated with the failure. If the DSN1LOGP utility fails, refer to Section 4 (Volume 1) of DB2 Administration Guide for information about recovery from log failures.

00D10022

Explanation: The DB2 stand-alone log services GET processing macro (DSNJSLR) issued this reason code. A gap in the log RBA range has been encountered when switching log data sets, indicating missing log records, and the log RBA of the next record following the gap is greater than the end RBA of the RBA range specified by the RANGE parameter.

This condition may or may not be intentional on the part of the user. Normally, a continuous set of log records are supplied as input by the ACTIVEn and ARCHIVE ddnames in the user’s JCL. If a log data set was intentionally (or unintentionally) removed, this condition will arise.

This reason code is issued by the following CSECTs: DSNJRS03, DSNJRS04

System Action: In response to the DSNJSLR FUNC=GET call, DB2 places a return code of 8 in register 15 and a reason code of 00D10022 in register 0. No abend is issued by the stand-alone log services CSECT (DSNJRS01), and no information is written to SYS1.LOGREC data set.

Information about the results of the GET request is also returned in the stand-alone log GET Feedback Area (SLRF). A pointer to the next log record following the gap is placed in SLRFFRAD.

The stand-alone log services program is under the control of a user-written program that uses the DSNJSLR macro. The user program must therefore anticipate and react to a nonzero return code and a nonzero reason code, possibly by terminating the execution of the user program.

For additional details about the stand-alone log services, including a sample of an application program which reacts to nonzero return codes and nonzero reason codes, refer to Appendix C (Volume 2) of DB2 Administration Guide.
System Programmer Response: Use the print log map (DSNJU004) utility to examine the conditional restart control records and the RBA ranges of log data sets. Note any RBA gaps which may have resulted from the truncation of the log during a conditional restart.

If it appears that a log error may have occurred, execute the log print utility (DSN1LOGP) to attempt to obtain a detailed report of the log record(s) associated with the failure. If the DSN1LOGP utility fails, refer to Section 4 (Volume 1) of DB2 Administration Guide for information about recovery from log failures.

00D10024
Explanation: The DB2 stand-alone log services GET processing macro (DSNJSLR) issued this reason code. A log RBA sequence error has occurred. The RBA of the previous log record is greater than the RBA of the current log record.

This reason code is issued by the following CSECT: DSNJRS03

System Action: In response to the DSNJSLR FUNC=GET call, DB2 places a return code of 8 in register 15 and a reason code of 00D10024 in register 0. No abend is issued by the stand-alone log services CSECT (DSNJRS01), and no information is written to SYS1.LOGREC data set.

Information about the results of the GET request is also returned in the stand-alone log GET Feedback Area (SLRF). A pointer to the next log record following the gap is placed in SLRFRAD.

The stand-alone log services program is under the control of a user-written program that uses the DSNJSLR macro. The user program must therefore anticipate and react to a nonzero return code and a nonzero reason code, possibly by terminating the execution of the user program.

For additional details about the stand-alone log services, including a sample of an application program which reacts to nonzero return codes and nonzero reason codes, refer to Appendix C (Volume 2) of DB2 Administration Guide.

00D10025
Explanation: The DB2 stand-alone log services GET processing macro (DSNJSLR) issued this reason code. A VSAM error occurred while reading an active log data set.

This reason code is issued by the following CSECT: DSNJRS03

System Action: In response to the DSNJSLR FUNC=GET call, DB2 places a return code of 12 in register 15 and a reason code of 00D10025 in register 0. No abend is issued by the stand-alone log services CSECT (DSNJRS01), and no information is written to SYS1.LOGREC data set.

Information about the results of the GET request is also returned in the stand-alone log GET Feedback Area (SLRF). The VSAM GET error return code is placed in SLRFRG15. The RPL error code (RPLERRCD) is placed in SLRFERCD. The dname of the data set on which the activity occurred is placed in SLRFDDNM.

The stand-alone log services program is under the control of a user-written program that uses the DSNJSLR macro. The user program must therefore anticipate and react to a nonzero return code and a nonzero reason code, possibly by terminating the execution of the user program.

For additional details about the stand-alone log services, including a sample of an application program which reacts to nonzero return codes and nonzero reason codes, refer to Appendix C (Volume 2) of DB2 Administration Guide.

System Programmer Response: Refer to the DFSMS/MVS: Macro Instructions for Data Sets to determine the meaning of the VSAM GET error returned in SLRFRG15, and the RPL error code returned in SLRFERCD. Take appropriate action to correct the error.

00D10026
Explanation: The DB2 stand-alone log services GET processing macro (DSNJSLR) issued this reason code. The GET processing was unable to locate a log data set containing the requested RBA.

This reason code is issued by the following CSECT: DSNJRS04

System Action: In response to the DSNJSLR FUNC=GET call, DB2 places a return code of 8 in register 15 and a reason code of 00D10026 in register 0. No abend is issued by the stand-alone log services CSECT (DSNJRS01), and no information is written to SYS1.LOGREC data set.

Information about the results of the GET request is also returned in the stand-alone log GET Feedback Area (SLRF). The RBA for which the GET request failed is placed in SLRFRBA.

The stand-alone log services program is under the control of a user-written program that uses the DSNJSLR macro. The user program must therefore anticipate and react to a nonzero return code and a nonzero reason code, possibly by terminating the execution of the user program.

For additional details about the stand-alone log services, including a sample of an application program which reacts to nonzero return codes and nonzero reason codes, refer to Appendix C (Volume 2) of DB2 Administration Guide.

System Programmer Response: There could be several reasons for this error:
• The RBA range supplied in the RANGE parameter may have exceeded the upper or lower bound of RBAs available on all active log data sets and all archive log data sets. This will normally occur when the user has specified the bootstrap data set (BSDS) method in the JCL.
• The RBA range supplied in the RANGE parameter may have exceeded the upper or lower bound of RBAs available on the active log data sets and/or archive log data sets supplied in the user’s JCL. This will occur when the user has supplied log data sets using the ACTIVEEn and ARCHIVE ddnames.

To resolve the problem, use the print log map (DSNJU004) utility to obtain a listing of the archive and active log data sets, and their corresponding RBA ranges. Check the user’s JCL and the user’s RANGE parameter to ensure that they are in harmony with one another. Correct the JCL and RANGE parameters as necessary, and rerun the application.

00D10027

Explanation: The DB2 stand-alone log services GET processing macro (DSNJSLR) issued this reason code. A VSAM error occurred while reading the bootstrap data set (BSDS).

This reason code is issued by the following CSECT: DSNJRS03

System Action: In response to the DSNJSLR FUNC=GET call, DB2 places a return code of 12 in register 15 and a reason code of 00D10027 in register 0. No abend is issued by the stand-alone log services CSECT (DSNJRS01), and no information is written to SYS1.LOGREC data set.

Information about the results of the GET request is also returned in the stand-alone log GET Feedback Area (SLRF). The VSAM GET error return code is placed in SLRFRG15. The RPL error code (RPLERRCD) is placed in SLRERFCD.

The stand-alone log services program is under the control of a user-written program that uses the DSNJSLR macro. The user program must therefore anticipate and react to a nonzero return code and a nonzero reason code, possibly by terminating the execution of the user program.

For additional details about the stand-alone log services, including a sample of an application program which reacts to the nonzero return codes and nonzero reason codes, refer to Appendix C (Volume 2) of DB2 Administration Guide.

00D10028

Explanation: The DB2 stand-alone log services OPEN processing macro (DSNJSLR) issued this reason code. Both LRSN range and Cl mode read were specified on the OPEN request when reading the log of a DB2 system. However, when reading the log in CI mode, range can be specified only in RBA.

This reason code is issued by the following CSECT: DSNJRS06

System Action: In response to DSNJSLR FUNC=OPEN call, DB2 places a return code of 12 in register 15 and a reason code of 00D10028 in register 0. No abend is issued by the stand-alone log services, and no information is written to SYS1.LOGREC data set.

User Response: Correct the range specification on the OPEN request, and rerun the job.

For additional details about the stand-alone log services, including a sample of an application program which reacts to the nonzero return codes and nonzero reason codes, refer to Appendix C (Volume 2) of DB2 Administration Guide.
For additional details about the stand-alone log services, including a sample of an application program which reacts to nonzero return codes and nonzero reason codes, refer to Appendix C (Volume 2) of DB2 Administration Guide.

System Programmer Response: Refer to the DFSMS/MVS: Macro Instructions for Data Sets to determine the meaning of the VSAM OPEN error returned in SLRFRG15, and the ACB error code returned in SLRFERCD. Take appropriate action, and then resubmit the application job.

00D1002B

Explanation: The DB2 stand-alone log services GET processing macro (DSNJSLR) issued this reason code. The GET processing has requested an RBA in an active log data set which was previously not opened. A VSAM OPEN error occurred while opening the active log data set. The error was determined to be one which could be corrected; however, a system error occurred while executing an MVS TESTCB macro to determine whether the active log data set which had just been opened was a VSAM ESDS data set or a VSAM LDS data set.

This reason code is issued by the following CSECT: DSNJR03

System Action: In response to the DSNJSLR FUNC=GET call, DB2 places a return code of 12 in register 15 and a reason code of 00D1002B in register 0. No abend is issued by the stand-alone log services CSECT (DSNJRS01), and no information is written to SYS1.LOGREC data set.

Information about the results of the GET request is also returned in the stand-alone log GET Feedback Area (SLRF). The VSAM return code from the original VSAM OPEN error is placed in SLRFRG15. The ACB error code (ACBERFLG) from the ACB used in the original VSAM OPEN operation is placed in SLRFERCD. The ddname of the data set on which the activity occurred is placed in SLRFDDNM.

The stand-alone log services program is under the control of a user-written program that uses the DSNJSLR macro. The user program must therefore anticipate and react to a nonzero return code and a nonzero reason code, possibly by terminating the execution of the user program.

For additional details about the stand-alone log services, including a sample of an application program which reacts to nonzero return codes and nonzero reason codes, refer to Appendix C (Volume 2) of DB2 Administration Guide.

System Programmer Response: Refer to the DFSMS/MVS: Macro Instructions for Data Sets to determine the meaning of the VSAM OPEN error returned in SLRFRG15, and the ACB error code returned in SLRFERCD. Take appropriate action, and resubmit the application job.

00D1002C

Explanation: The DB2 stand-alone log services GET processing macro (DSNJSLR) issued this reason code. The GET processing has requested an RBA in an active log data set which was previously not opened. A VSAM OPEN error occurred while opening the active log data set. The error was determined to be one which could be corrected by use of an access method services VERIFY, but the access method services VERIFY failed.

This reason code is issued by the following CSECT: DSNJR03

System Action: In response to the DSNJSLR FUNC=GET call, DB2 places a return code of 12 in register 15 and a reason code of 00D1002C in register 0. No abend is issued by the stand-alone log services CSECT (DSNJRS01), and no information is written to SYS1.LOGREC data set.

Information about the results of the GET request is also returned in the stand-alone log GET Feedback Area (SLRF). The VSAM return code from the original VSAM OPEN error is placed in SLRFRG15. The ACB error code (ACBERFLG) from the ACB used in the original VSAM OPEN operation is placed in SLRFERCD. The ddname of the data set on which the activity occurred is placed in SLRFDDNM.

The stand-alone log services program is under the control of a user-written program that uses the DSNJSLR macro. The user program must therefore anticipate and react to a nonzero return code and a nonzero reason code, possibly by terminating the execution of the user program.

For additional details about the stand-alone log services, including a sample of an application program which reacts to nonzero return codes and nonzero reason codes, refer to Appendix C (Volume 2) of DB2 Administration Guide.

System Programmer Response: Refer to the DFSMS/MVS: Macro Instructions for Data Sets to determine the meaning of the VSAM OPEN error returned in SLRFRG15, and the ACB error code returned in SLRFERCD. Take appropriate action, and resubmit the application job.

00D1002D

Explanation: The DB2 stand-alone log services GET processing macro (DSNJSLR) issued this reason code. The GET processing has requested an RBA in an active log data set which was previously not opened. A VSAM OPEN error occurred while opening the active log data set. The open error was corrected by use of an access method services VERIFY, but a subsequent attempt to reposition the VSAM pointer back to the beginning of the active log data set (via access method services POINT) failed.

This reason code is issued by the following CSECT: DSNJR03

System Action: In response to the DSNJSLR FUNC=GET call, DB2 places a return code of 12 in register 15 and a reason code of 00D1002D in register 0. No abend is issued by the stand-alone log services CSECT (DSNJRS01), and no information is written to SYS1.LOGREC data set.

Information about the results of the GET request is also returned in the stand-alone log GET Feedback Area (SLRF). The VSAM return code from the original VSAM OPEN error is placed in SLRFRG15. The ACB error code (ACBERFLG) from the ACB used in the original VSAM OPEN operation is placed...
in SLRFERCD. The ddname of the data set on which the activity occurred is placed in SLRFDDNM.

The stand-alone log services program is under the control of a user-written program that uses the DSNJSLR macro. The user program must therefore anticipate and react to a nonzero return code and a nonzero reason code, possibly by terminating the execution of the user program.

For additional details about the stand-alone log services, including a sample of an application program which reacts to nonzero return codes and nonzero reason codes, refer to Appendix C (Volume 2) of DB2 Administration Guide.

System Programmer Response: Refer to the DFSMS/MVS: Macro Instructions for Data Sets to determine the meaning of the VSAM OPEN error returned in SLRFRG15, and the ACB error code returned in SLRFERCD. Take appropriate action (in most cases, the problem can be solved by use of an AMS VERIFY against the active log data set named in the SLRFDNM field of the SLRF). Once the problem is solved, resubmit the application job.

**00D10030**

**Explanation:** The DB2 stand-alone log services GET and CLOSE processing macro (DSNJSLR) issued this reason code. The stand-alone log services uses a request block to establish communication between itself and the invoking application program. The address to the request block is returned to the application program on a FUNC=OPEN call, and is required for all subsequent stand-alone FUNC=GET and FUNC=CLOSE calls in the RBR parameter. This reason code is returned to the invoking application when the RBR does not address a valid stand-alone request block. Subsequently, the application program’s request cannot be processed.

This reason code is issued by the following CSECT: DSNJRS01

**System Action:** In response to the DSNJSLR FUNC=GET or FUNC=CLOSE call, DB2 places a return code of 8 in register 15 and a reason code of 00D10030 in register 0. No abend is issued by the stand-alone log services CSECT (DSNJRS01), and no information is written to SYS1.LOGREC data set.

The stand-alone log services program is under the control of a user-written program that uses the DSNJSLR macro. The user program must therefore anticipate and react to a nonzero return code and a nonzero reason code, possibly by terminating the execution of the user program.

For additional details about the stand-alone log services, including a sample of an application program which reacts to nonzero return codes and nonzero reason codes, refer to Appendix C (Volume 2) of DB2 Administration Guide.

System Programmer Response: Refer to the appropriate MVS publication to determine the meaning of the SVC 99 error code (S99ERROR) and information code (S99INFO) returned in SLRFRG15, and SVC 99 information code. Take the appropriate action to correct the error, and resubmit the application job.

**00D10040**

**Explanation:** The DB2 stand-alone log services GET processing macro (DSNJSLR) issued this reason code. The GET processing has requested an RBA in an archive log data set which was previously not opened. An attempt is made to open the second file on the archive log tape (the first file normally contains the bootstrap data set, while the second is normally the archive log data set). If this first attempt failed because the archive log data set was not the second file on an archive tape, then the RDJFCB macro is used to change the data set sequence number from the default value of 2 to a value of 1, before the OPEN is attempted again. This reason code is generated when an error was returned from the RDJFCB macro.

This reason code is issued by the following CSECT: DSNJRS03

**System Action:** In response to the DSNJSLR FUNC=GET call, DB2 places a return code of 12 in register 15 and a reason code of 00D10040 in register 0. No abend is issued by the stand-alone log services CSECT (DSNJRS01), and no information is written to SYS1.LOGREC data set.

Information about the results of the GET request is also returned in the stand-alone log GET Feedback Area (SLRF). The SVC 99 error code (S99ERROR) and information code (S99INFO) are placed in the SLRFRG and SLRFINFO fields, respectively. The ddname of the data set on which the activity occurred is placed in SLRFDDNM.

The stand-alone log services program is under the control of a user-written program that uses the DSNJSLR macro. The user program must therefore anticipate and react to a nonzero return code and a nonzero reason code, possibly by terminating the execution of the user program.

For additional details about the stand-alone log services, including a sample of an application program which reacts to nonzero return codes and nonzero reason codes, refer to Appendix C (Volume 2) of DB2 Administration Guide.

System Programmer Response: Refer to the appropriate MVS publication to determine the meaning of the SVC 99 error code (S99ERROR) and information code (S99INFO) returned in SLRFRG15, and SVC 99 information code. Take the appropriate action to correct the error, and resubmit the application job.
of the data set on which the activity occurred is placed in SLRFDDNM.

The stand-alone log services program is under the control of a user-written program that uses the DSNJSLR macro. The user program must therefore anticipate and react to a nonzero return code and a nonzero reason code, possibly by terminating the execution of the user program.

For additional details about the stand-alone log services, including a sample of an application program which reacts to nonzero return codes and nonzero reason codes, refer to Appendix C (Volume 2) of DB2 Administration Guide.

System Programmer Response: Refer to the DFSMS/MVS: Using Advanced Services to determine the meaning of the RDJFCB error code returned in SLRFGR15. Take the appropriate action to correct the error, and resubmit the application job.

00D10044
Explanation: The DB2 stand-alone log services GET processing macro (DSNJSLR) issued this reason code. The GET processing has requested an RBA in an archive log data set which was previously not opened. The attempt to open the archive log data set failed.

This reason code is issued by the following CSECT: DSNJRS03

System Action: In response to the DSNJSLR FUNC=GET call, DB2 places a return code of 12 in register 15 and a reason code of 00D10044 in register 0. No abend is issued by the stand-alone log services CSECT (DSNJRS01), and no information is written to SYS1.LOGREC data set.

Information about the results of the GET request is also returned in the stand-alone log GET Feedback Area (SLRF). The ddname of the data set on which the activity occurred is placed in SLRFDDNM.

The stand-alone log services program is under the control of a user-written program that uses the DSNJSLR macro. The user program must therefore anticipate and react to a nonzero return code and a nonzero reason code, possibly by terminating the execution of the user program.

For additional details about the stand-alone log services, including a sample of an application program which reacts to nonzero return codes and nonzero reason codes, refer to Appendix C (Volume 2) of DB2 Administration Guide.

System Programmer Response: Determine the cause of the QSAM GET error, take the appropriate action to correct the error, and resubmit the application job.

00D10048
Explanation: The DB2 stand-alone log services GET processing macro (DSNJSLR) issued this reason code. A QSAM GET error occurred while reading an archive log data set.

This reason code is issued by the following CSECT: DSNJRS03

System Action: In response to the DSNJSLR FUNC=GET call, DB2 places a return code of 12 in register 15 and a reason code of 00D10048 in register 0. No abend is issued by the stand-alone log services CSECT (DSNJRS01), and no information is written to SYS1.LOGREC data set.

Information about the results of the GET request is also returned in the stand-alone log GET Feedback Area (SLRF). The ddname of the data set on which the activity occurred is placed in SLRFDDNM.

The stand-alone log services program is under the control of a user-written program that uses the DSNJSLR macro. The user program must therefore anticipate and react to a nonzero return code and a nonzero reason code, possibly by terminating the execution of the user program.

For additional details about the stand-alone log services, including a sample of an application program which reacts to nonzero return codes and nonzero reason codes, refer to Appendix C (Volume 2) of DB2 Administration Guide.

System Programmer Response: Examine the user’s JCL, and remove the occurrence of the BSDS data set as one of the concatenated ARCHIVE data sets. Resubmit the application job.

00D10061
Explanation: The DB2 stand-alone log services GET processing macro (DSNJSLR) issued this reason code. The log record control interval (CI) requested by the application program was read successfully from an active log data set or an archive log data set. However, the physical record length returned from reading the CI is not the expected length. The GET function will complete, but will issue this reason code as a warning.

The length of a log CI in an active log data set is expected to be 4089 bytes. The length of a log CI in an archive log data set is expected to be 4096 bytes.
This reason code is issued by the following CSECT: DSNJRS03

**System Action:** In response to the DSNJSLR FUNC=GET call, DB2 places a return code of 4 in register 15 and a reason code of 00D10061 in register 0. No abend is issued by the stand-alone log services CSECT (DSNJRS01), and no information is written to SYS1.LOGREC data set. The GET function will complete, but will issue this reason code as a warning.

Information about the results of the GET request is also returned in the stand-alone log GET Feedback Area (SLRF).

The length and address of the CI are placed in fields SLRFRCLL and SLRFFRAD, respectively. The RBA associated with the CI is placed in SLRFRBA. The ‘ddname’ of the data set on which the activity occurred is placed in SLRFDDNM.

The stand-alone log services program is under the control of a user-written program that uses the DSNJSLR macro. The user program must therefore anticipate and react to a nonzero return code and a nonzero reason code, possibly by terminating the execution of the user program.

For additional details about the stand-alone log services, including a sample of an application program which reacts to nonzero return codes and nonzero reason codes, refer to Appendix C (Volume 2) of DB2 Administration Guide.

**System Programmer Response:** Several possibilities exist for the cause of this condition:

- The Recovery Log Manager component of DB2 did not originally construct the LRH properly.
- The log record header (LRH) for the log record segment was damaged after it was written by the DB2 subsystem.
- The application program continued to process after receipt of a 00D10021 reason code (gap in the log).

If the error was caused by the application program, modifications to the application program may be required.

If the error is a suspected DB2 problem, run the log print (DSN1LOGP) utility, specifying a range of RBAs which would encompass the problem RBA. Determine if the LRH of the log record segment is truly in error by looking at the record segments directly preceding and after the record segment in question.

---

**00D10062**

**Explanation:** The DB2 stand-alone log services GET processing macro (DSNJSLR) issued this reason code. The requested record was found to be a last spanned record segment, but a preceding first record segment does not exist. The GET function will complete, but will issue this reason code as a warning.

This reason code is issued by the following CSECT: DSNJRS02

**System Action:** In response to the DSNJSLR FUNC=GET call, DB2 places a return code of 4 in register 15 and a reason code of 00D10062 in register 0. No abend is issued by the stand-alone log services CSECT (DSNJRS01), and no information is written to SYS1.LOGREC data set. The GET function will complete, but will issue this reason code as a warning.

Information about the results of the GET request is also returned in the stand-alone log GET Feedback Area (SLRF).

The length and address of the requested record are placed in fields SLRFRCLL and SLRFFRAD, respectively. The RBA associated with the log record segment is placed in SLRFRBA. The ddname of the data set on which the activity occurred is placed in SLRFDDNM.

The stand-alone log services program is under the control of a user-written program that uses the DSNJSLR macro. The user program must therefore anticipate and react to a nonzero return code and a nonzero reason code, possibly by terminating the execution of the user program.

For additional details about the stand-alone log services, including a sample of an application program which reacts to
If the error was caused by the application program, modifications to the application program may be required.

If the error is a suspected DB2 problem, run the log print (DSN1LOGP) utility, specifying a range of RBAs which would encompass the problem RBA. Determine if the LRH of the log record segment is truly in error by looking at the record segments directly preceding and after the record segment in question.

00D10101
Explanation: The ENDRBA value specified in the control statement was either greater or less than any known RBA, but cold start was not specified for the conditional restart.
This abend reason code is issued by the following CSECT: DSNJW306
System Action: DB2 startup is terminated.
Operator Response: Notify the system programmer.
System Programmer Response: Run the change log inventory (DSNJU003) utility with a CREATRBA control statement that has an RBA value known to the system in the BSDS, or that has the ENDRBA and STARTRBA specifying the same RBA (cold start).
Refer to Section 4 (Volume 1) of DB2 Administration Guide for more information.

00D10102
Explanation: A request to disable data sharing failed.
This abend reason code is issued by the following CSECT: DSNJS001
System Action: DB2 startup terminates.
Operator Response: Collect an SVC dump, and contact the system programmer.
System Programmer Response: Obtain the SVC dump for analysis. To disable data sharing, you must run the disable data sharing job (DSNTIJGF) and then restart DB2. For more information, see Chapter 3 of DB2 Data Sharing: Planning and Administration.
Problem Determination: General register 2 contains a return code. Explanation of the return code is as follows:
2 A request to disable data sharing is in the BSDS, but a conditional restart record is not present. You must use job DSNTIJGF for the correct conditional restart control record.
4 A request to disable data sharing is recorded in the BSDS, but the conditional restart record is not correct. You cannot request a normal conditional restart with a disable request. You must use job DSNTIJGF.
8 Update of the BSDS failed. Data sharing was not disabled. See DB2 code 00D10411 for problem determination. After the BSDS problem is fixed, run DSNTIJGF to disable data sharing, and then restart DB2.
10 A delete in the BSDS failed. Data sharing was not disabled. See DB2 code 00D10413 for problem determination. After the BSDS problem is fixed, run DSNTIJGF to disable data sharing, and then restart DB2.

00D10103
Explanation: DB2 failed to open the shared communications area (SCA) structure.
This abend reason code is issued by the following CSECT: DSNJS001
System Action: DB2 startup terminates.
Operator Response: Collect the SYS1.LOGREC and SVC dump and contact the system programmer.
System Programmer Response: Obtain the SYS1.LOGREC and SVC dump for analysis.
Problem Determination: Review the DB2 system console for possible DSN7xxxx messages that could relate to this problem.

00D10104
Explanation: DB2 failed to find the data sharing member record in the BSDS during DB2 startup.
This abend reason code is issued by the following CSECT: DSNJS001
System Action: DB2 startup terminates.
Operator Response: Collect the SYS1.LOGREC and SVC dump and contact the system programmer.
System Programmer Response: Obtain the SYS1.LOGREC and SVC dump for analysis.
Problem Determination: If this is the first startup of a new member joining the data sharing group, run the DSNTIJUZ job created to enable data sharing for this DB2 subsystem, and then restart this DB2 subsystem. Also, check whether the correct BSDS is specified in the DB2 master startup procedure. See message DSN7501A for additional problem determination.

00D10105
Explanation: DB2 found a mismatch in the shared communications area (SCA) while a new member was attempting to join a data sharing group.
This abend reason code is issued by the following CSECT: DSNJS001
System Action: DB2 startup terminates.
Operator Response: Collect the SYS1.LOGREC and SVC dump and contact the system programmer.
System Programmer Response: Obtain the SYS1.LOGREC and SVC dump for analysis.
Problem Determination: This indicates that a new member is attempting to join the data sharing group. If this a migration from DB2 3.1, then catalog migration must be completed before a new member can join this data sharing group. Wait until catalog migration completes, then restart this DB2 to join the group. Otherwise, group restart is required. Wait until group restart completes, then restart this DB2 to join the group. For more information, see Chapter 3 of DB2 Data Sharing: Planning and Administration.
00D10106
Explanation: DB2 failed to update an internal control record in the BSDS for data sharing.
This abend reason code is issued by the following CSECT: DSNJS001
System Action: DB2 startup terminates.
Operator Response: Collect the SYS1.LOGREC and SVC dump and contact the system programmer.
System Programmer Response: Obtain the SYS1.LOGREC and SVC dump for analysis.
Problem Determination: See DB2 code 00D10411 for problem determination.

00D10107
Explanation: DB2 failed to insert an internal control record in the BSDS for data sharing re-enable.
This abend reason code is issued by the following CSECT: DSNJS001
System Action: DB2 startup terminates.
Operator Response: Collect the SYS1.LOGREC and SVC dump and contact the system programmer.
System Programmer Response: Obtain the SYS1.LOGREC and SVC dump for analysis.
Problem Determination: See DB2 code 00D10412 for problem determination.

00D10108
Explanation: DB2 failed to write an internal control record in the shared communications area (SCA) structure.
This abend reason code is issued by the following CSECT: DSNJS001
System Action: DB2 startup terminates.
Operator Response: Collect the SYS1.LOGREC and SVC dump and contact the system programmer.
System Programmer Response: Obtain the SYS1.LOGREC and SVC dump for analysis.
Problem Determination: See message DSN7501A for problem determination.

00D10109
Explanation: DB2 found a shared communications area (SCA) structure during the data sharing re-enable process. This structure should not be built at this time.
This abend reason code is issued by the following CSECT: DSNJS001
System Action: DB2 startup terminates.
Operator Response: Collect the SYS1.LOGREC and SVC dump and contact the system programmer.
System Programmer Response: Display the existing SCA structures on this MVS system.
Problem Determination: If an SCA structure already exists for this DB2 data sharing group, use the MVS command SETXCF to delete this structure, then restart DB2 to complete the re-enable process.

00D1010A
Explanation: DB2 failed to write a record for re-enable in the shared communications area (SCA) structure.
This abend reason code is issued by the following CSECT: DSNJS001
System Action: DB2 startup terminates.
Operator Response: Collect the SYS1.LOGREC and SVC dump and contact the system programmer.
System Programmer Response: Obtain the SYS1.LOGREC and SVC dump for analysis.
Problem Determination: Review the DB2 system console for possible DSN7xxxx messages that could relate to this problem.

00D1010B
Explanation: DB2 failed to update an internal control record in the BSDS for data sharing.
This abend reason code is issued by the following CSECT: DSNJS001
System Action: DB2 startup terminates.
Operator Response: Collect the SYS1.LOGREC and SVC dump and contact the system programmer.
System Programmer Response: Obtain the SYS1.LOGREC and SVC dump for analysis.
Problem Determination: See DB2 Code 00D10411 for problem determination.

00D1010C
Explanation: DB2 failed to write an internal control record in the shared communications area (SCA) to enable data sharing.
This abend reason code is issued by the following CSECT: DSNJS001
System Action: DB2 startup terminates.
Operator Response: Collect the SYS1.LOGREC and SVC dump and contact the system programmer.
System Programmer Response: Obtain the SYS1.LOGREC and SVC dump for analysis.
Problem Determination: Review the DB2 system console for possible DSN7xxxx messages that could relate to this problem.

00D1010D
Explanation: DB2 could not find an internal control record for data sharing in the BSDS or the shared communications area (SCA).
This abend reason code is issued by the following CSECT: DSNJS001
System Action: DB2 startup terminates.
Operator Response: Collect the SYS1.LOGREC and SVC dump and contact the system programmer.
System Programmer Response: Obtain the SYS1.LOGREC and SVC dump for analysis.
Problem Determination: Check to be sure that this DB2 system is supposed to be part of a data sharing group. If this DB2 is in a group, you can restart another DB2 subsystem that is in the same DB2 data sharing group first, and then restart. If
no other DB2 subsystems exist in this group, you must recover the BSDS before restarting.

**00D1010E**

**Explanation:** DB2 failed to write an internal control record for a data sharing restart in the shared communications area (SCA) structure.

This abend reason code is issued by the following CSECT: DSNJS001

**System Action:** DB2 startup terminates.

**Operator Response:** Collect the SYS1.LOGREC and SVC dump and contact the system programmer.

**System Programmer Response:** Obtain the SYS1.LOGREC and SVC dump for analysis.

**Problem Determination:** Review the DB2 system console for possible DSN7xxxx messages that could relate to this problem.

**00D1010F**

**Explanation:** DB2 failed an attempt to change the generic LU or location name in the shared communications area (SCA) structure for the data sharing group.

This abend reason code is issued by the following CSECT: DSNJS001

**System Action:** DB2 startup terminates.

**Operator Response:** Collect the SYS1.LOGREC and SVC dump and contact the system programmer.

**System Programmer Response:** Obtain the SYS1.LOGREC and SVC dump for analysis. All members in the data sharing group must first be stopped, then this DB2 subsystem can be restarted to make this change.

**Problem Determination:**

**00D10110**

**Explanation:** DB2 failed to write an internal control record for a generic LU or location name change in the shared communications area (SCA) structure.

This abend reason code is issued by the following CSECT: DSNJS001

**System Action:** DB2 startup terminates.

**Operator Response:** Collect the SYS1.LOGREC and SVC dump and contact the system programmer.

**System Programmer Response:** Obtain the SYS1.LOGREC and SVC dump for analysis.

**Problem Determination:** DB2 failed in a write to the SCA structure for a data sharing restart change. Review the DB2 system console for possible DSN7xxxx messages that could relate to this problem.

**00D10111**

**Explanation:** DB2 failed to find an internal record in the shared communications area (SCA) that is needed to re-enable data sharing.

This abend reason code is issued by the following CSECT: DSNJS001

**System Action:** DB2 startup terminates.

**Operator Response:** Collect the SYS1.LOGREC and SVC dump and contact the system programmer.

**System Programmer Response:** Obtain the SYS1.LOGREC and SVC dump for analysis. To re-enable data sharing, you must start the surviving DB2 member first before other members can be started. If this is meant to be a re-enable attempt, check whether the surviving member was started first. If this re-enable is already complete, check that this is the correct data sharing group.

Another possibility is that the SCA is damaged. Use the MVS command SETXCF to rebuild the SCA.

**00D10112**

**Explanation:** DB2 failed to update an internal control record in the BSDS for a generic LU or location name change.

This abend reason code is issued by the following CSECT: DSNJS001

**System Action:** DB2 startup terminates.

**Operator Response:** Collect the SYS1.LOGREC and SVC dump and contact the system programmer.

**System Programmer Response:** Obtain the SYS1.LOGREC and SVC dump for analysis.

**Problem Determination:** DB2 failed in an update to the BSDS for a data sharing generic LU or location name change. See DB2 Code 00D10411 for problem determination.

**00D10113**

**Explanation:** DB2 failed to update a data sharing member's information record in the BSDS to enable data sharing.

This abend reason code is issued by the following CSECT: DSNJS001

**System Action:** DB2 startup terminates.

**Operator Response:** Collect the SYS1.LOGREC and SVC dump and contact the system programmer.

**System Programmer Response:** Obtain the SYS1.LOGREC and SVC dump for analysis.

**Problem Determination:** See DB2 Code 00D10411 for problem determination.

**00D10114**

**Explanation:** DB2 failed to write a data sharing member information record in the shared communications area (SCA) for a restart of data sharing.

This abend reason code is issued by the following CSECT: DSNJS001

**System Action:** DB2 startup terminates.

**Operator Response:** Collect the SYS1.LOGREC and SVC dump and contact the system programmer.
System Programmer Response: Obtain the SYS1.LOGREC and SVC dump for analysis.

Problem Determination: Review the DB2 system console for possible DSN7xxxx messages that could relate to this problem.

00D10115
Explanation: DB2 failed to update the data sharing record in the BSDS to reset the enable flag.
This abend reason code is issued by the following CSECT: DSNJS001
System Action: DB2 startup terminates.
Operator Response: Collect the SYS1.LOGREC and SVC dump and contact the system programmer.
System Programmer Response: Obtain the SYS1.LOGREC and SVC dump for analysis.
Problem Determination: See DB2 code 00D10411 for problem determination.

00D10116
Explanation: DB2 failed to update an internal control record in the BSDS for non-data sharing migration or fallback with DB2.
This abend reason code is issued by the following CSECT: DSNJS001
System Action: DB2 startup terminates.
Operator Response: Collect the SYS1.LOGREC and SVC dump and contact the system programmer.
System Programmer Response: Obtain the SYS1.LOGREC and SVC dump for analysis.
Problem Determination: See DB2 code 00D10411 for problem determination.

00D10117
Explanation: DB2 failed to truncate and switch to a new log for data sharing re-enable.
This abend reason code is issued by the following CSECT: DSNJS001
System Action: DB2 startup terminates.
Operator Response: Collect the SYS1.LOGREC and SVC dump and contact the system programmer.
System Programmer Response: Obtain the SYS1.LOGREC and SVC dump for analysis.
Problem Determination: Determine why DB2 failed to truncate and switch to a new log. DB2 might be using the last log. If so, determine why off-load has not occurred. See DB2 messages DSNJ319I and DSNJ320I for problem determination.

00D10210
Explanation: An unsuccessful completion of a SET WRITE CURSOR has occurred. An invalid write cursor ID was supplied.
This abend reason code is issued by the following CSECT: DSNJW002
System Action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.
Operator Response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.
System Programmer Response: Obtain the SYS1.LOGREC and the SVC dump. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Problem Determination: RLM standard diagnostic information is provided in "X'D1...... Codes" on page 657. Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 2, 5, 16.

00D10219
Explanation: DB2 found that the current LRSN is less than the prior LRSN after calculating a delta for the current LRSN.
System Action: DB2 terminates.
Operator Response: Collect the SYS1.LOGREC and SVC dump and contact the system programmer.
System Programmer Response: Obtain the SYS1.LOGREC and SVC dump for analysis.
Problem Determination: This indicates that the system time is now less than the time recorded earlier in the DB2 log data set. Check that this DB2 subsystem is using the correct BSDS and log data sets. Also check that the correct system time is being used.
If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

00D10220
Explanation: An unsuccessful completion of a LOG WRITE has occurred. An invalid write cursor ID was supplied.
This abend reason code is issued by the following CSECT: DSNJW001
System Action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.
Operator Response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.
System Programmer Response: Obtain the SYS1.LOGREC and the SVC dump. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Problem Determination: RLM standard diagnostic information is provided in "X'D1...... Codes" on page 657. Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 2, 5, 16.

00D10221
Explanation: An unsuccessful completion of a LOG WRITE has occurred. An invalid number of areas was specified.
This abend reason code is issued by the following CSECT: DSNJW001
System Action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.
Operator Response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System Programmer Response: Obtain the SYS1.LOGREC and the SVC dump. If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem Determination: RLM standard diagnostic information is provided in "X’D1……’ Codes" on page 657

Collect the following diagnostic items listed in Appendix B. 
"Problem determination" on page 1051 2, 5, 16.

00D10222

Explanation: An unsuccessful completion of a LOG WRITE has occurred. The record length specified was greater than 32767.

This abend reason code is issued by the following CSECT: DSNJW001

System Action: An execution unit writes a record SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

Operator Response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System Programmer Response: Obtain the SYS1.LOGREC and the SVC dump. If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem Determination: RLM standard diagnostic information is provided in "X’D1……’ Codes" on page 657

Collect the following diagnostic items listed in Appendix B. 
"Problem determination" on page 1051 2, 5, 16.

00D10233

Explanation: An unsuccessful completion of a CHECK LOG has occurred. The specified RBA is beyond the end of the log.

This abend reason code is issued by the following CSECT: DSNJW004

System Action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

Operator Response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System Programmer Response: Obtain the SYS1.LOGREC and the SVC dump. If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem Determination: RLM standard diagnostic information is provided in "X’D1……’ Codes" on page 657

Collect the following diagnostic items listed in Appendix B. 
"Problem determination" on page 1051 2, 5, 16.

00D10223

Explanation: There was an attempt to modify a log data set while doing a conditional restart with CSRONLY specified.

This abend reason code is issued by the following CSECTs: DSNJB001, DSNJW001

System Action: DB2 startup terminates.

Operator Response: Notify the system programmer.

System Programmer Response: If a complete DB2 startup is desired, remove CSRONLY from the control statement. Restart DB2.

00D10230

Explanation: A CHECK LOG was issued and the log RBA specified in the macro had not been written to DASD at the time.

This abend reason code is issued by the following CSECT: DSNJW004

System Action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

Problem Determination: RLM standard diagnostic information is provided in "X’D1……’ Codes" on page 657

Collect the following diagnostic items listed in Appendix B. 
"Problem determination" on page 1051 2, 5, 16.

00D10240

Explanation: An unsuccessful completion of a CLOSE LOG FOR WRITE has occurred. An invalid write cursor ID was supplied.

This abend reason code is issued by the following CSECT: DSNJW002

System Action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

Operator Response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System Programmer Response: Obtain the SYS1.LOGREC and the SVC dump. If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem Determination: RLM standard diagnostic information is provided in "X’D1……’ Codes" on page 657

Collect the following diagnostic items listed in Appendix B. 
"Problem determination" on page 1051 2, 5, 16.
00D10250

Explanation: An unrecoverable error occurred while updating either the BSDS or the MVS catalog to reflect changes in active log data sets.

This abend reason code is issued by the following CSECT: DSNJW307

System Action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. DB2 then terminates abnormally.

Operator Response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System Programmer Response: Obtain the SYS1.LOGREC and SVC dump. Correct the error, and restart DB2.

Problem Determination: RLM standard diagnostic information is provided in "Problem determination on page 1051". In addition, see abend reason code '00D10252' for a description of the information recorded in the variable recording area (VRA) of the SDWA. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for identifying and reporting the problem.

Examine the console log for a DSNJxxxx message preceding this abend to determine whether the error was a BSDS error or an MVS catalog update error.

Collect the following diagnostic items listed in Appendix B. "Problem determination on page 1051" 1, 2, 5, 16.

00D10251

Explanation: An unrecoverable error occurred in the log buffer writer.

This abend reason code is issued by the following CSECT: DSNJW008

System Action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. DB2 then terminates abnormally.

Operator Response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System Programmer Response: Obtain the SYS1.LOGREC and the SVC dump.

This error is usually caused by a previous error that was recorded on SYS1.LOGREC and produced an SVC dump. The SYS1.LOGREC entries and SVC dump should be examined to determine the primary error that occurred.

Problem Determination: RLM standard diagnostic information is provided in "Problem determination on page 1051". In addition, see abend reason code '00D10252' for a description of the information recorded in the variable recording area (VRA) of the SDWA. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B. "Problem determination on page 1051" 1, 2, 5, 16.

00D10252

Explanation: This abend reason code is used to define the format of the information recorded in the variable recording area (VRA) of the SDWA.

This abend reason code is issued by the following CSECT: DSNJW008

System Action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump.

Operator Response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System Programmer Response: Obtain the SYS1.LOGREC and SVC dump.

Problem Determination: RLM standard diagnostic information is provided in "Problem determination on page 1051". In addition, the following information is contained in the variable recording area (VRA) of the SDWA:

- Reason code '00D10252' stored with key=VRARC.
- The log buffer writer recovery tracking area is stored with key=VRARRP. These fields in the VRA are described by the system mapping macro IHAVRA.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B. "Problem determination on page 1051" 1, 2, 5.

00D10253

Explanation: An application program check occurred in an MVCP instruction that attempted to move a parameter list or other data from the caller's address space to the recovery log manager address space.

This abend reason code is issued by the following CSECTs: DSNJR001 DSNJW001 DSNJW002

System Action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump.

Operator Response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System Programmer Response: Obtain the SYS1.LOGREC and SVC dump. Examine the area from which data was to be moved. It may be in the wrong key, or the address may be the cause of the problem. The failing instruction has a DA opcode and indicates the registers showing address and length to be moved.

Problem Determination: RLM standard diagnostic information is provided in "Problem determination on page 1051". In addition, see abend reason code '00D10252' for a description of the information recorded in the variable recording area (VRA) of the SDWA. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B. "Problem determination on page 1051" 1, 2, 5, 16.
**00D10254**

**Explanation:** An application program check occurred in an MVCS instruction that attempted to move data from the recovery log manager address space to the caller’s address space.

This abend reason code is issued by the following CSECT: DSNJR0103

**System Action:** An execution unit writes a record to SYS1.LOGREC and requests an SVC dump.

**Operator Response:** Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

**System Programmer Response:** Obtain the SYS1.LOGREC and SVC dump. Examine the area to which data was to be moved. It may be in the wrong key, or the address may be the cause of the problem. The failing instruction has a DB opcode and indicates the registers showing address and length to be moved.

**Problem Determination:** RLM standard diagnostic information is provided in X’D1......’ Codes on page 657.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 5, 16.

---

**00D10255**

**Explanation:** DSNJR008 attempted to resume the waiting execution unit, and a failure occurred leaving the state of the resume indoubt.

This abend reason code is issued by the following CSECTs: DSNJR008, DSNJW026

**System Action:** An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The DB2 subsystem then terminates to avoid leaving the execution unit in a state of indefinite suspension.

**Operator Response:** Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2 subsystem, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** RLM standard diagnostic information is provided in X’D1......’ Codes on page 657.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 2, 5, 16.

---

**00D10256**

**Explanation:** Recursive abends were detected while trying to reinitialize an archive log read service task.

This abend reason code is issued by the following CSECTs: DSNJR008, DSNJR026, DSNJR028

**System Action:** An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The DB2 subsystem then terminates to avoid leaving an execution unit in a state of indefinite suspension.

**Operator Response:** Collect the SYS1.LOGREC, SVC dump, and console output. Notify the system programmer.

**System Programmer Response:** Obtain the SYS1.LOGREC, the SVC dump, and a listing of the BSDS by running the print log map (DSNU004) utility. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** RLM standard diagnostic information is provided in X’D1......’ Codes on page 657.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 2, 5, 16.

---

**00D10261**

**Explanation:** While scanning the records and record segments in a log control interval (CI), it was discovered that the forward record chain was broken. This condition is the result of an incorrect record length in the log record header of some record in the log CI.

This reason code is issued by the following CSECTs:

DSNJW005

**System Action:** This reason code can be issued by an active DB2 subsystem as the log buffers are scanned before they are written to the active log, or by the DB2 stand-alone log services GET processing macro (DSNJLSLR) as a CI is retrieved from a user-specified active or archive log data set.

If the reason code is issued by an active DB2 subsystem, then an abend is issued. A diagnostic record is written to SYS1.LOGREC, and an SVC dump is requested.

- If the error was detected by DSNJW009, then message DSNJ012I is issued and the calling agent is terminated.
- If the error was detected by DSNJW009, then message DSNJ012I is issued and the DB2 subsystem is terminated.
- If the error was detected by DSNJW107, then the DB2 subsystem is terminated.

If this reason code is issued as the result of DB2 stand-alone log services GET processing, no abend is issued by the stand-alone log services CSECT (DSNJRS01), and no information is written to SYS1.LOGREC data set. Rather, in response to the DSNJLSLR FUNC=GET call, DB2 places a return code of 4 in register 15 and a reason code of 00D10261 in register 0. Information about the results of the GET request is also returned in the stand-alone log GET feedback area (SLRF). The RBA of the record in error is placed in SLRFRBA. The address and length of the CI which contains the errant log record header are placed in SLRRFRAD and SLRRFRCLL, respectively. The ddname of the data set on which the activity occurred is placed in SLRFDADM.

For additional details about the stand-alone log services, refer to Appendix C (Volume 2) of DB2 Administration Guide.

**Operator Response:** If the reason code is issued by an active DB2 subsystem, collect the SYS1.LOGREC and SVC dump, and notify the system programmer.

**System Programmer Response:** If the reason code is issued by an active DB2 subsystem, obtain the SYS1.LOGREC and the SVC dump from the operator.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 2, 5, 16.

**Problem Determination:** If the reason code is issued by an active DB2 subsystem:
If the reason code is issued upon return of an invocation of the DB2 stand-alone log services macro (DSNJSLR), then an additional user-written exit or diagnostic routine may have to be written.

00D10262

Explanation: While scanning a log control interval (CI), the offset to the last record or record segment in the CI was found to be incorrect.

This reason code is issued by the following CSECTs:

DSNJOFF1 DSNJRS01 DSNJR005 DSNJW009 DSNJW107

System Action: This reason code can be issued by an active DB2 subsystem as the log buffers are scanned before they are written to the active log, or by the DB2 stand-alone log services GET processing macro (DSNJSLR) as a CI is retrieved from a user-specified active or archive log data set.

If the reason code is issued by an active DB2 subsystem, then an abend is issued. A diagnostic record is written to SYS1.LOGREC, and an SVC dump is requested.

- If the error was detected by DSNJOFF1, then the archiving of the active log data set is terminated and the faulty active log data set is marked ‘stopped’.
- If the error was detected by DSNJR005, then message DSNJ012I is issued and the calling agent is terminated.
- If the error was detected by DSNJW009, then message DSNJ012I is issued and the DB2 subsystem is terminated.
- If the error was detected by DSNJW107, then the DB2 subsystem is terminated.

If this reason code is issued as the result of DB2 stand-alone log services GET processing, no abend is issued and the stand-alone log services CSECT (DSNJRS01), and no information is written to SYS1.LOGREC data set. Rather, in response to the DSNJSLR FUNC=GET call, DB2 places a return code of 4 in register 0.

If the reason code is issued by an active DB2 subsystem, then an abend is issued. A diagnostic record is written to SYS1.LOGREC, and an SVC dump is requested.

- If the error was detected by DSNJOFF1, then the archiving of the active log data set is terminated and the faulty active log data set is marked ‘stopped’.
- If the error was detected by DSNJR005, then message DSNJ012I is issued and the calling agent is terminated.
- If the error was detected by DSNJW009, then message DSNJ012I is issued and the DB2 subsystem is terminated.
- If the error was detected by DSNJW107, then the DB2 subsystem is terminated.

If this reason code is issued as the result of DB2 stand-alone log services GET processing, no abend is issued and the stand-alone log services CSECT (DSNJRS01), and no information is written to SYS1.LOGREC data set. Rather, in response to the DSNJSLR FUNC=GET call, DB2 places a return code of 4 in register 0.

If the reason code is issued by an active DB2 subsystem, then an abend is issued. A diagnostic record is written to SYS1.LOGREC, and an SVC dump is requested.

- If the error was detected by DSNJOFF1, then the archiving of the active log data set is terminated and the faulty active log data set is marked ‘stopped’.
- If the error was detected by DSNJR005, then message DSNJ012I is issued and the calling agent is terminated.
- If the error was detected by DSNJW009, then message DSNJ012I is issued and the DB2 subsystem is terminated.
- If the error was detected by DSNJW107, then the DB2 subsystem is terminated.

If this reason code is issued as the result of DB2 stand-alone log services GET processing, no abend is issued and the stand-alone log services CSECT (DSNJRS01), and no information is written to SYS1.LOGREC data set. Rather, in response to the DSNJSLR FUNC=GET call, DB2 places a return code of 4 in register 0.

For additional details about the stand-alone log services, refer to Appendix C (Volume 2) of DB2 Administration Guide.

Operator Response: If the reason code is issued by an active DB2 subsystem, collect the SYS1.LOGREC and SVC dump, and notify the system programmer.

System Programmer Response: If the reason code is issued by an active DB2 subsystem, obtain the SYS1.LOGREC and the SVC dump from the operator.

Collect the following diagnostic items listed in Appendix B: Problem determination on page 1051: 2, 5, 16.
System Programmer Response: If the reason code is issued by an active DB2 subsystem, obtain the SYS1.LOGREC and the SVC dump from the operator.

Collect the following diagnostic items listed in Appendix B on page 657:

Problem Determination: If the reason code is issued by an active DB2 subsystem:

- RLM standard diagnostic information is provided under X’D1......’ Codes on page 657
- Refer to Section 4 (Volume 1) of DB2 Administration Guide for information about recovery from log failures.
- Refer to Appendix C (Volume 2) of DB2 Administration Guide for failure analysis procedures, with particular emphasis on the use of the DB2 stand-alone log Services.
- Obtain a DSN1LOGP detail report containing the log record(s) associated with the failure.

If the reason code is issued upon return of an invocation of the DB2 stand-alone log services macro (DSNJSLR), then an additional user-written exit or diagnostic routine may have to be written.

00D10264

Explanation: While scanning a log control interval (CI), the beginning log RBA of the CI was not the expected RBA.

This reason code is issued by the following CSECTs:

DSNJW107
DSNJ012I
DSNJRS01
DSNJ005
DSNW009

System Action: This reason code can be issued by an active DB2 subsystem as the log buffers are scanned before they are written to the active log, or by the DB2 stand-alone log services GET processing macro (DSNJSLR) as a CI is retrieved from a user-specified active or archive log data set.

If the reason code is issued by an active DB2 subsystem, then an abend is issued. A diagnostic record is written to SYS1.LOGREC, and an SVC dump is requested.

- If the error was detected by DSNJW107, then message DSNJ012I is issued and the calling agent is terminated.
- If the error was detected by DSNW009, then message DSNJ012I is issued and the DB2 subsystem is terminated.
- If the error was detected by DSNJW107, then the DB2 subsystem is terminated.

If this reason code is issued as the result of DB2 stand-alone log services GET processing, no abend is issued by the stand-alone log services CSECT (DSNJRS01), and no information is written to SYS1.LOGREC data set. Rather, in response to the DSNJSLR FUNC=GET call, DB2 places a return code of 4 in register 15 and a reason code of 00D10265 in register 0. Information about the results of the GET request is also returned in the active log GET Feedback Area (SLRF). The expected RBA of the beginning of the CI is placed in SLRFRBA. The address and length of the CI are placed in SLRFRAD and SLRFRCVL, respectively. The dname of the data set on which the activity occurred is placed in SLRFPDDNM.

For additional details about the stand-alone log services, refer to Appendix C (Volume 2) of DB2 Administration Guide.

Operator Response: If the reason code is issued by an active DB2 subsystem, collect the SYS1.LOGREC and SVC dump, and notify the system programmer.

System Programmer Response: If the reason code is issued by an active DB2 subsystem, obtain the SYS1.LOGREC and the SVC dump from the operator.

Collect the following diagnostic items listed in Appendix B on page 657:

Problem Determination: If the reason code is issued by an active DB2 subsystem:

- RLM standard diagnostic information is provided under X’D1......’ Codes on page 657
- Refer to Section 4 (Volume 1) of DB2 Administration Guide for information about recovery from log failures.
- Refer to Appendix C (Volume 2) of DB2 Administration Guide for failure analysis procedures, with particular emphasis on the use of the DB2 stand-alone log Services.
- Obtain a DSN1LOGP detail report containing the log record(s) associated with the failure.

If the reason code is issued upon return of an invocation of the DB2 stand-alone log services macro (DSNJSLR), then an additional user-written exit or diagnostic routine may have to be written.

00D10265

Explanation: While scanning the records and record segments in a log control interval (CI), it was discovered the backward record chain was broken. This condition is the result of an incorrect record length in the log record header of some record in the log CI.

This reason code is issued by the following CSECTs:

DSNJW107
DSNJ012I
DSNJRS01
DSNJ005
DSNW009

System Action: This reason code can be issued by an active DB2 subsystem as the log buffers are scanned before they are written to the active log, or by the DB2 stand-alone log services GET processing macro (DSNJSLR) as a CI is retrieved from a user-specified active or archive log data set.

If the reason code is issued by an active DB2 subsystem, then an abend is issued. A diagnostic record is written to SYS1.LOGREC, and an SVC dump is requested.

- If the error was detected by DSNJW107, then message DSNJ012I is issued and the calling agent is terminated.
- If the error was detected by DSNW009, then message DSNJ012I is issued and the DB2 subsystem is terminated.
- If the error was detected by DSNJW107, then the DB2 subsystem is terminated.

If this reason code is issued as the result of DB2 stand-alone log services GET processing, no abend is issued by the stand-alone log services CSECT (DSNJRS01), and no information is written to SYS1.LOGREC data set. Rather, in response to the DSNJSLR FUNC=GET call, DB2 places a return code of 4 in register 15 and a reason code of 00D10265 in register 0. Information about the results of the GET request is also returned in the stand-alone log GET Feedback Area (SLRF). The RBA of the record in error is placed in SLRFRBA. The address and
length of the CI are placed in SLRFFRAD and SLRFRCLL, respectively. The ddname of the data set on which the activity occurred is placed in SLRFDNNM.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Operator Response:** If the reason code is issued by an active DB2 subsystem, collect the SYS1.LOGREC and SVC dump, and notify the system programmer.

**System Programmer Response:** If the reason code is issued by an active DB2 subsystem, obtain the SYS1.LOGREC and the SVC dump from the operator.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 105.

**Problem Determination:** If the reason code is issued by an active DB2 subsystem:

- RLM standard diagnostic information is provided under 'X'0D1...... Codes' on page 657.
- Refer to Section 4 (Volume 1) of DB2 Administration Guide for information about recovery from log failures.
- If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
- Obtain a DSN1LOGP detail report containing the log record()s associated with the failure.

If the reason code is issued upon return of an invocation of the DB2 stand-alone log services macro (DSNJSLR), then an additional user-written exit or diagnostic routine may have to be written.

---

**00D10266**

**Explanation:** While scanning a log control interval (CI), a unit of recovery ID or LINK RBA in some record was found to be inconsistent with the beginning log RBA of the CI.

This reason code is issued by the following CSECTs:

<table>
<thead>
<tr>
<th>CSECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>DSNJOFF1</td>
</tr>
<tr>
<td>DSNJR005</td>
</tr>
<tr>
<td>DSNJR009</td>
</tr>
<tr>
<td>DSNW107</td>
</tr>
</tbody>
</table>

**System Action:** This reason code can be issued by an active DB2 subsystem as the log buffers are scanned before they are written to the active log, or by the DB2 stand-alone log services GET processing macro (DSNJSLR) as a CI is retrieved from a user-specified active or archive log data set.

If the reason code is issued by an active DB2 subsystem, then an abort is issued. A diagnostic record is written to SYS1.LOGREC, and an SVC dump is requested.

- If the error was detected by DSNJOFF1, then the archiving of the active log data set is terminated and the faulty active log data set is marked ‘stopped’.
- If the error was detected by DSNJR005, then message DSNJ012I is issued and the calling agent is terminated.
- If the error was detected by DSNJR009, then message DSNJ012I is issued and the DB2 subsystem is terminated.
- If the error was detected by DSNW107, then the DB2 subsystem is terminated.

If this reason code is issued as the result of DB2 stand-alone log services GET processing, no abort is issued by the stand-alone log services CSECT (DSNJRS01), and no information is written to SYS1.LOGREC data set. Rather, in response to the DSNJSLR FUNC=GET call, DB2 places a return code of 4 in register 15 and a reason code of 00D10266 in register 0. Information about the results of the GET request is also returned in the stand-alone log GET Feedback Area (SLRF). The RBA of the log record with the invalid RBA is placed in SLRFRBA. The address and length of the CI are placed in SLRFFRAD and SLRFRCLL, respectively. The ddname of the data set on which the activity occurred is placed in SLRFDNNM.

For additional details about the stand-alone log services, refer to Appendix C (Volume 2) of DB2 Administration Guide.

**Operator Response:** If the reason code is issued by an active DB2 subsystem, collect the SYS1.LOGREC and SVC dump, and notify the system programmer.

**System Programmer Response:** If the reason code is issued by an active DB2 subsystem, collect the SYS1.LOGREC and SVC dump, and notify the system programmer.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 105.

**Problem Determination:** If the reason code is issued by an active DB2 subsystem:

- RLM standard diagnostic information is provided under 'X'0D1...... Codes' on page 657.
- Refer to Section 4 (Volume 1) of DB2 Administration Guide for information about recovery from log failures.
- Refer to Appendix C (Volume 2) of DB2 Administration Guide for failure analysis procedures, with particular emphasis on the use of the DB2 stand-alone log Services.
- Obtain a DSN1LOGP detail report containing the log record()s associated with the failure.

If the reason code is issued upon return of an invocation of the DB2 stand-alone log services macro (DSNJSLR), then an additional user-written exit or diagnostic routine may have to be written.
If the error was detected by DSNJW107, then the DB2 subsystem is terminated.

If this reason code is issued as the result of DB2 stand-alone log services GET processing, no abend is issued by the stand-alone log services CSECT (DSNJRS01), and no information is written to SYS1.LOGREC data set. Rather, in response to the DSNJSLR FUNC=GET call, DB2 places a return code of 4 in register 15 and a reason code of 00D10267 in register 0. Information about the results of the GET request is also returned in the stand-alone log GET Feedback Area (SLRF). The RBA of the record segment in error is placed in SLRFFRAD and SLRFRBA. The ddname of the data set on which the activity occurred is placed in SLRFDDNM.

For additional details about the stand-alone log services, refer to Appendix C (Volume 2) of DB2 Administration Guide.

**Operator Response:** If the reason code is issued by an active DB2 subsystem, collect the SYS1.LOGREC and SVC dump, and notify the system programmer.

**System Programmer Response:** If the reason code is issued by an active DB2 subsystem, collect the SYS1.LOGREC and the SVC dump from the operator.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 2, 5, 16.

**Problem Determination:** If the reason code is issued by an active DB2 subsystem:

- RLM standard diagnostic information is provided under ‘X’D1......’ Codes on page 657
- Refer to Section 4 (Volume 1) of DB2 Administration Guide for information about recovery from log failures.
- Refer to Appendix C (Volume 2) of DB2 Administration Guide for failure analysis procedures, with particular emphasis on the use of the DB2 stand-alone log Services.
- Obtain a DSN1LOGP detail report containing the log record(s) associated with the failure.

If the reason code is issued upon return of an invocation of the DB2 stand-alone log services macro (DSNJSLR), then an additional user-written exit or diagnostic routine may have to be written.

**Explanation:** While scanning a log control interval (CI), a first or middle spanned record segment was not the last segment contained in the log CI.

This reason code is issued by the following CSECTs:

- DSNJFF1
- DSNJRS01
- DSNJR005
- DSNJW009
- DSNJW107

**System Action:** This reason code can be issued by an active DB2 subsystem as the log buffers are scanned before they are written to the active log, or by the DB2 stand-alone log services GET processing macro (DSNJSLR) as a CI is retrieved from a user-specified active or archive log data set.

If the reason code is issued by an active DB2 subsystem, then an abend is issued. A diagnostic record is written to SYS1.LOGREC, and an SVC dump is requested.

- If the error was detected by DSNJFF1, then the archiving of the active log data set is terminated and the faulty active log data set is marked “stopped”.

- If the error was detected by DSNJRS01, then message DSNJW009 is issued and the calling agent is terminated.

- If the error was detected by DSNJR005, then message DSNJ0121 is issued and the calling agent is terminated.

- If the error was detected by DSNJR005, then message DSNJW009 is issued and the DB2 subsystem is terminated.

- If the error was detected by DSNJW107, then the DB2 subsystem is terminated.

If this reason code is issued as the result of DB2 stand-alone log services GET processing, no abend is issued by the stand-alone log services CSECT (DSNJRS01), and no information is written to SYS1.LOGREC data set. Rather, in response to the DSNJSLR FUNC=GET call, DB2 places a return code of 4 in register 15 and a reason code of 00D10268 in register 0. Information about the results of the GET request is also returned in the stand-alone log GET Feedback Area (SLRF). The RBA of the record segment in error is placed in SLRFB. The address and length of the CI are placed in SLRFFRAD and SLRFRBA, respectively. The ddname of the data set on which the activity occurred is placed in SLRFDDNM.

For additional details about the stand-alone log services, refer to Appendix C (Volume 2) of DB2 Administration Guide.

**Operator Response:** If the reason code is issued by an active DB2 subsystem, collect the SYS1.LOGREC and SVC dump, and notify the system programmer.

**System Programmer Response:** If the reason code is issued by an active DB2 subsystem, collect the SYS1.LOGREC and the SVC dump from the operator.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 2, 5, 16.

**Problem Determination:** If the reason code is issued by an active DB2 subsystem:

- RLM standard diagnostic information is provided under ‘X’D1......’ Codes on page 657
- Refer to Section 4 (Volume 1) of DB2 Administration Guide for information about recovery from log failures.
- Refer to Appendix C (Volume 2) of DB2 Administration Guide for failure analysis procedures, with particular emphasis on the use of the DB2 stand-alone log Services.
- Obtain a DSN1LOGP detail report containing the log record(s) associated with the failure.

If the reason code is issued upon return of an invocation of the DB2 stand-alone log services macro (DSNJSLR), then an additional user-written exit or diagnostic routine may have to be written.

**Explanation:** An unrecoverable error was found in one of the buffers, while moving the current log buffer to the static write buffer ("shadow buffer") in preparation for the physical write to the active log. Refer to Section 4 (Volume 1) of DB2 Administration Guide for information about recovery from log failures.

This reason code is issued by the following CSECT: DSNJW107

**System Action:** An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The subsystem then terminates.

**Operator Response:** Collect the SYS1.LOGREC and requests an SVC dump. Notify the system programmer.

**System Programmer Response:** Obtain the SYS1.LOGREC and the SVC dump. If you suspect an error in DB2, refer to
Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: RLM standard diagnostic information is provided under Appendix B “Problem determination” on page 657
Collect the following diagnostic items listed in Appendix B “Problem determination” on page 1051 2, 5, 16.

00D10301
Explanation: An unsuccessful completion of an OPEN LOG FOR READ has occurred. An open log read cursor already exists for this execution block (EB). Only one log read cursor per EB is permitted.
This abend reason code is issued by the following CSECT: DSNJR001
System Action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.
Operator Response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.
System Programmer Response: Obtain the SYS1.LOGREC and SVC dump. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: RLM standard diagnostic information is provided in Appendix B “Problem determination” on page 657
Collect the following diagnostic items listed in Appendix B “Problem determination” on page 1051 2, 5, 16.

00D10302
Explanation: An unsuccessful completion of an OPEN LOG FOR READ has occurred. A valid scope was not specified.
This abend reason code is issued by the following CSECT: DSNJR001
System Action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.
Operator Response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.
System Programmer Response: Obtain the SYS1.LOGREC and SVC dump. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: RLM standard diagnostic information is provided in Appendix B “Problem determination” on page 657
Collect the following diagnostic items listed in Appendix B “Problem determination” on page 1051 2, 5, 16.

00D10303
Explanation: An unsuccessful completion of an OPEN LOG FOR READ has occurred. An invalid log RBA range was specified. HIGHRBA is less than LOWRBA.
This abend reason code is issued by the following CSECT: DSNJR001
System Action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.
Operator Response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.
System Programmer Response: Obtain the SYS1.LOGREC and the SVC dump. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: RLM standard diagnostic information is provided in Appendix B “Problem determination” on page 657
Collect the following diagnostic items listed in Appendix B “Problem determination” on page 1051 2, 5, 16.

00D10304
Explanation: An unknown function was requested in an open log read cursor.
System Action: DB2 issues a return code of 4 and reason code of 00D10304 to the requesting function.
System Programmer Response: Review the DB2 console for related errors.
Problem Determination: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

00D10305
Explanation: A peer log read request was made without a peer log read cursor.
System Action: DB2 issues a return code of 4 and reason code of 00D10305 to the requesting function.
System Programmer Response: Review the DB2 console for related errors.
Problem Determination: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

00D10306
Explanation: A request to read merged log records failed.
System Action: DB2 issues a return code of 4 and reason code of 00D10306 to the requesting function.
System Programmer Response: Review the DB2 console for related errors.
Problem Determination: The requesting function has put this error code out. Check on this function.
If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
00D10307

**Explanation:** A log read open in data sharing failed because the RBA values were not increasing or were overlapping.

**System Action:** DB2 issues a return code of 4 and reason code of 00D10307 to the requesting function.

**System Programmer Response:** Review the DB2 console for related errors.

**Problem Determination:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

---

00D10308

**Explanation:** A log read open in data sharing failed.

**System Action:** DB2 issues a return code of 4 and reason code of 00D10308 to the requesting function.

**System Programmer Response:** Review the DB2 console for related errors.

**Problem Determination:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

---

00D10309

**Explanation:** A peer BSDS open request failed.

**System Action:** DB2 issues a return code of 4 and reason code of 00D10309 to the requesting function.

**System Programmer Response:** Review the DB2 console for related errors.

**Problem Determination:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

---

00D1030A

**Explanation:** A peer log read request was made in non-data sharing.

**System Action:** DB2 issues a return code of 4 and reason code of 00D1030A to the requesting function.

**System Programmer Response:** Review the DB2 console for related errors.

**Problem Determination:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

---

00D10310

**Explanation:** An unsuccessful completion of a SET READ CURSOR RANGE has occurred. The specified log read cursor was not opened by the execution block submitting this request. All input requests must be submitted under the execution block that opened the cursor.

This abend reason code is issued by the following CSECT: DSNJR001

**System Action:** An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

**Operator Response:** Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

**System Programmer Response:** Obtain the SYS1.LOGREC and the SVC dump. If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** RLM standard diagnostic information is provided in "X’D1......’ Codes" on page 657. In addition, register 6 contains the address of the execution block (EB). All log read cursors reside in a recovery log manager storage pool whose header address is in the log manager block (LMB) at LMBRCPHB. The LMB is pointed to by register 5.

Collect the following diagnostic items listed in Appendix B:

"Problem determination on page 1051" 5, 16.

---

00D10311

**Explanation:** An unsuccessful completion of a SET READ CURSOR RANGE has occurred. An invalid write cursor ID was specified.

This abend reason code is issued by the following CSECT: DSNJR001

**System Action:** An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

**Operator Response:** Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

**System Programmer Response:** Obtain the SYS1.LOGREC and the SVC dump. If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** RLM standard diagnostic information is provided in "X’D1......’ Codes" on page 657. In addition, all log write cursors reside in a recovery log manager storage pool whose header address is in the log manager block (LMB) at LMBWCPHB. The LMB is pointed to by register 5. Read cursors are in a similar pool at LMBRCPHB.

Collect the following diagnostic items listed in Appendix B:

("Problem determination on page 1051" 5, 16.

---

00D10312

**Explanation:** An unsuccessful completion of a SET READ CURSOR RANGE has occurred. An invalid log RBA range was specified. HIGHRBA is lower than LOWRBA.

This abend reason code is issued by the following CSECT: DSNJR001

**System Action:** An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

**Operator Response:** Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

**System Programmer Response:** Obtain the SYS1.LOGREC and the SVC dump. If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** RLM standard diagnostic information is provided in "X’D1......’ Codes" on page 657. In addition, all log write cursors reside in a recovery log manager storage pool whose header address is in the log manager block (LMB) at LMBRCPHB. The LMB is pointed to by register 5. Read cursors are in a similar pool at LMBRCPHB.

Collect the following diagnostic items listed in Appendix B:

("Problem determination on page 1051" 5, 16.

---
00D10322

Explanation: An unsuccessful completion of a LOG READ has occurred. MODE=DIRECT with record matching the specified TYPE was not found.

This abend reason code is issued by the following CSECT: DSNJR003

System Action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

Operator Response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System Programmer Response: Obtain the SYS1.LOGREC and the SVC dump. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: RLM standard diagnostic information is provided in X’D1......’ Codes on page 657

Collect the following diagnostic items listed in Appendix B, Problem determination on page 1051: 5, 16.

00D10323

Explanation: An unsuccessful completion of a LOG READ has occurred. MODE=DIRECT with record matching the specified SCOPE is not found.

This abend reason code is issued by the following CSECT: DSNJR003

System Action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

Operator Response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System Programmer Response: Obtain the SYS1.LOGREC and the SVC dump. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: RLM standard diagnostic information is provided in X’D1......’ Codes on page 657

Collect the following diagnostic items listed in Appendix B, Problem determination on page 1051: 5, 16.

00D10324

Explanation: An unsuccessful completion of a LOG READ has occurred. MODE=DIRECT with record matching the specified CDATA is not found.

This abend reason code is issued by the following CSECT: DSNJR003

System Action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

Operator Response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System Programmer Response: Obtain the SYS1.LOGREC and the SVC dump. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: RLM standard diagnostic information is provided in X’D1......’ Codes on page 657

Collect the following diagnostic items listed in Appendix B, Problem determination on page 1051: 5, 16.

00D10325

Explanation: An unsuccessful completion of a LOG READ has occurred. The sum of CDATA length value and CDATA offset value is greater than 256.

This abend reason code is issued by the following CSECT: DSNJR003

System Action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

Operator Response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System Programmer Response: Obtain the SYS1.LOGREC and the SVC dump. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: RLM standard diagnostic information is provided in X’D1......’ Codes on page 657

Collect the following diagnostic items listed in Appendix B, Problem determination on page 1051: 5, 16.

00D10326

Explanation: An unsuccessful completion of a LOG READ has occurred. The macro invocation specified that no wait was to occur because of a busy archive log data set (ADSWAIT(NO)). The macro invocation also specified that, rather than returning with a condition code (COND(NO)), an abend should be issued by the recovery log manager (RLM) subcomponent. The RLM determined that the request was on an archive log data set that was in use.

This abend reason code is issued by the following CSECT: DSNJR008

System Action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

Problem Determination: RLM standard diagnostic information is provided in X’D1......’ Codes on page 657

Collect the following diagnostic items listed in Appendix B, Problem determination on page 1051: 5, 16.

00D10327

Explanation: An unsuccessful completion of a LOG READ has occurred because of an invalid LOGRBA value. MODE=DIRECT with requested RBA does not match the start of a log record.

This abend reason code is issued by the following CSECT: DSNJR003

System Action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

Operator Response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System Programmer Response: Obtain the SYS1.LOGREC and the SVC dump. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Problem Determination: RLM standard diagnostic information is provided in "X’D1......’ Codes" on page 657

00D10328
Explanation: A LOG READ completed unsuccessfully, because a MODE request sequence was invalid. A read request specifying a sequential MODE (any MODE except DIRECT) must be preceded by an open log for read, a set read cursor range, or a read with the same MODE parameter value. It is invalid to intermix read requests with different sequential mode values.

This abend reason code is issued by the following CSECT: DSNJR003

System Action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

Operator Response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System Programmer Response: Obtain the SYS1.LOGREC and the SVC dump. Also, obtain a listing of the BSDS by running the print log map (DSNJU004) utility. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: RLM standard diagnostic information is provided in "X’D1......’ Codes" on page 657

Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051 5, 16.

00D10329
Explanation: A LOG READ completed unsuccessfully, because an I/O error occurred while reading the log data set.

Refer to Section 4 (Volume 1) of DB2 Administration Guide for information about recovery from log failures.

This abend reason code is issued by the following CSECT: DSNJR003

System Action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

Operator Response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System Programmer Response: Examine SYS1.LOGREC and SVC dump information, if a dump was produced. Also, examine any prior messages with a DSNJ prefix from recovery log manager allocation processing.

Problem Determination: RLM standard diagnostic information is provided in "X’D1......’ Codes" on page 657

Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051 5, 16.

This abend reason code is issued by the following CSECT: DSNJR003

00D1032C
Explanation: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

Operator Response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System Programmer Response: Obtain the SYS1.LOGREC and the SVC dump. Also, obtain a listing of the BSDS by running the print log map (DSNJU004) utility. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: RLM standard diagnostic information is provided in "X’D1......’ Codes" on page 657

Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051 2, 5, 16.

00D1032B
Explanation: A LOG READ completed unsuccessfully because an error occurred while trying to allocate a log data set.

Refer to Section 4 (Volume 1) of DB2 Administration Guide for information about recovery from log failures.

System Action: An execution unit writes a record to SYS1.LOGREC and might request an SVC dump. The execution unit then terminates abnormally.

Operator Response: Collect the SYS1.LOGREC and SVC dump, if a dump was produced. Notify the system programmer.

System Programmer Response: Examine LOGREC and SVC dump information, if a dump was produced. Also, examine any prior messages with a DSNJ prefix from recovery log manager allocation processing.

Problem Determination: RLM standard diagnostic information is provided in "X’D1......’ Codes" on page 657

Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051 5, 16.

00D1032C
Explanation: An unsuccessful completion of a LOG READ has occurred. BSDS does not map the specified RBA into a log data set. Either the BSDS is in error, or the log data set has been deleted.

Refer to Section 4 (Volume 1) of DB2 Administration Guide for information about recovery from BSDS or log failures.

This abend reason code is issued by the following CSECT: DSNJR003

System Action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

Operator Response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System Programmer Response: Examine LOGREC and SVC dump information. Also, examine prior messages from recovery log manager open/close processing. These messages have a prefix of DSNJ.

Problem Determination: RLM standard diagnostic information is provided in "X’D1......’ Codes" on page 657

Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051 5, 16.

This abend reason code is issued by the following CSECT: DSNJR003
Collect the following diagnostic items listed in Appendix B.

**00D1032D**

**Explanation:** An unsuccessful completion of a LOG READ has occurred. The specified log read cursor was not opened by the execution block submitting this request. All input requests must be submitted under the execution block that opened the cursor.

This abend reason code is issued by the following CSECT: DSNJR003

**System Action:** An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

**Operator Response:** Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

**System Programmer Response:** Obtain the SYS1.LOGREC and the SVC dump. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** RLM standard diagnostic information is provided in [X'D1...... Codes' on page 657]. In addition, all log read cursors reside in a recovery log manager storage pool whose header address is in the log manager block (LMB) at LMBRCPHB. The LMB is pointed to by register 5.

Collect the following diagnostic items listed in Appendix B.

**Problem determination** on page 1051 5, 16.

**00D1032E**

**Explanation:** A LOG READ completed unsuccessfully due to an internal error.

This abend reason code is issued by the following CSECT: DSNJR003

**System Action:** An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

**Operator Response:** Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

**System Programmer Response:** Examine LOGREC and SVC dump information. LOG READ was passed a bad parameter list. The field which was detected to be in error (RDPLLOPT1) is the third byte of the second word traced in the log manager 311 trace entry. The RET field of this trace entry along with the MEPL may be used to determine which module issued the Log Read request. Both pieces of information are useful in isolating the failure.

**Problem Determination:** RLM standard diagnostic information is provided in [X'D1...... Codes' on page 657]. In addition, all log read cursors reside in a recovery log manager storage pool whose header address is in the log manager block (LMB) at LMBRCPHB. The LMB is pointed to by register 5.

Collect the following diagnostic item listed in Appendix B.

**Problem determination** on page 1051 5.

**00D1032F**

**Explanation:** A LOG READ completed unsuccessfully because the high range RBA provided was not the RBA of a valid log record. This is an internal error.

This abend reason code is issued by the following CSECT: DSNJR003

**System Action:** An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

**Operator Response:** Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

**System Programmer Response:** Obtain the SYS1.LOGREC and the SVC dump. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** RLM standard diagnostic information is provided in [X'D1...... Codes' on page 657]. In addition, all log read cursors reside in a recovery log manager storage pool whose header address is in the log manager block (LMB) at LMBRCPHB. The LMB is pointed to by register 5 and described by DSNDLMB.

**00D10330**

**Explanation:** An unsuccessful completion of a Close Log for read has occurred. The specified log read cursor was not opened by the execution block submitting this request. All input requests must be submitted under the execution block that opened the cursor.

This abend reason code is issued by the following CSECT: DSNJR001

**System Action:** An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

**Operator Response:** Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

**System Programmer Response:** Examine LOGREC and SVC dump information. LOG READ was passed a bad parameter list. The field which was detected to be in error (RDPLLOPT1) is the third byte of the second word traced in the log manager 311 trace entry. The RET field of this trace entry along with the MEPL may be used to determine which module issued the Log Read request. Both pieces of information are useful in isolating the failure.

**Problem Determination:** RLM standard diagnostic information is provided in [X'D1...... Codes' on page 657]. In addition, all log read cursors reside in a recovery log manager storage pool whose header address is in the log manager block (LMB) at LMBRCPHB. The LMB is pointed to by register 5.

Collect the following diagnostic items listed in Appendix B.

**Problem determination** on page 1051 5.

**00D10331**

**Explanation:** A LOG READ completed unsuccessfully because a LINK RBA did not point to the beginning of a LOG record. This is an internal error.

This abend reason code is issued by the following CSECT: DSNJR003

**System Action:** An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

**Operator Response:** Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.
System Programmer Response: Obtain the SYS1.LOGREC and the SVC dump. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: RLM standard diagnostic information is provided in "X'D1......' Codes on page 657." In addition, register 6 contains the address of the execution block (EB). All log read cursors reside in a recovery log manager storage pool whose header address is in the log manager block (LMB) at LMBRCPHB. The LMB is pointed to by register 5 and described in the DSNDLMB.

00D10332
Explanation: A log read completed unsuccessfully because a link RBA pointed to a log record with a different URID. This is an internal error.

This abend reason code is issued by the following CSECT: DSNJR103

System Action: A record is written to SYS1.LOGREC and an SVC DUMP is requested. The requesting execution unit is abnormally terminated.

Operator Response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System Programmer Response: While reading the log backwards using the LRHLINK RBAs, a log record was found that contained a different URID. A link read is normally done when processing a rollback or an abort. This abend is issued to prevent a rollback of the wrong transaction. If this occurs during abort processing, the subsystem is brought down. If the abend reoccurs on the subsequent restart of DB2, a conditional restart is necessary to bypass the invalid log record. Refer to Section 4 (Volume 1) of DB2 Administration Guide for information on recovering from a log failure during restart and resolving inconsistencies resulting from conditional restart.

Problem Determination: RLM standard diagnostic information is provided in "Recovery Log Manager Reason Codes (X'D1')." In addition, register 6 contains the address of the execution block (EB). All log read cursors reside in a recovery log manager storage pool whose header address is in the log manager block (LMB) at LMBRCPHB. The LMB is pointed to by register 5 and described in the DSNDLMB macro.

00D10333
Explanation: A log read failed because an internal error was detected by the Data Manager while examining the log record during recover and deferred restart.

This abend reason code is issued by the following CSECT: DSNJR103

System Action: The execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

User Response: Notify the system programmer.

Operator Response: Collect the SYS1.LOGREC and the SVC dump. Notify the system programmer.

System Programmer Response: Obtain the SYS1.LOGREC and the SVC dump. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: RLM standard diagnostic information is provided in "X'D1......' Codes on page 657." In addition, the following diagnostic information is provided in registers:

Register 0: the Data Mgr ERQUAL that identifies the place within CSECT DSNLGRX where the error was detected
Register 2, 3: the RBA of the log record that was being read at the time of the error
Register 7: the address of DSCF selection block
Register 8: the address of ssnmDBM1's selection block.

00D10334
Explanation: An unsuccessful completion of a LOG READ occurred because of an invalid LOGRBA value. MODE=SEQUENTIAL DIRECT with the requested RBA does not match the start of a log record.

This abend reason code is issued by the following CSECT: DSNJR003

System Action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

Operator Response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System Programmer Response: Obtain the SYS1.LOGREC and the SVC dump. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: RLM standard diagnostic information is provided in "Recovery Log Manager Reason Codes (X'D1')."

00D10335
Explanation: An unsuccessful completion of a LOG READ occurred because the log was not being read in ascending order for MODE=SEQUENTIAL DIRECT.

This abend reason code is issued by the following CSECT: DSNJR003

System Action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

Operator Response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System Programmer Response: Obtain the SYS1.LOGREC and the SVC dump. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: RLM standard diagnostic information is provided in "Recovery Log Manager Reason Codes (X'D1')."

00D10340
Explanation: An unsuccessful completion of a LOG READ has occurred. This reflects a logic failure internal to the recovery log manager (RLM) subcomponent and is probably caused by a passed parameter list being lost or a previous abort processing a LOG READ request.

This abend reason code is issued by the following CSECT: DSNJR008

System Action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.
Problem Determination: Collect all relevant diagnostic materials, including SYS1.LOGREC, SVC dump, and console output. Notify the system programmer.

System Programmer Response: Examine LOGREC and SVC dump information for prior abends during LOG READ processing. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051:

- 5, 16.

00D10341

Explanation: A LOG READ completed unsuccessfully because an error was detected during a Forward READ of the log record. This is an internal error.

This abend reason code is issued by the following CSECT: DSNJR103

System Action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

Operator Response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System Programmer Response: Obtain the SYS1.LOGREC and the SVC dump. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

00D10342

Explanation: A LOG READ completed unsuccessfully because an error was detected during a Backward READ of a log record. This is an internal error.

This abend reason code is issued by the following CSECT: DSNJR103

System Action: An execution unit writes a record to SYS1.LOGREC and requests a SVC dump. The execution unit then terminates abnormally.

Operator Response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System Programmer Response: Obtain the SYS1.LOGREC and the SVC dump. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

00D10343

Explanation: A LOG READ completed unsuccessfully because an error was detected during a READ of a log record due to an invalid CI offset. This is an internal error.

This abend reason code is issued by the following CSECT: DSNJR103

System Action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

Operator Response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System Programmer Response: Obtain the SYS1.LOGREC and the SVC dump. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: RLM standard diagnostic information is provided in X'D1......' Codes on page 657. In addition, register 6 contains the address of the execution block (EB). All log read cursors reside in a recovery log manager storage pool whose header address is in the log manager block (LMB) at LMBRCPHB. The LMB is pointed to by register 5 and described by DSNDLMB.

00D10345

Explanation: A LOG READ completed unsuccessfully because an error was received from a CATALOG LOCATE request for an archive log data set. The requested archive log data set might have been uncataloged or deleted.

System Action: An execution unit might write a record to SYS1.LOGREC and request an SVC dump.

Operator Response: Collect the SYS1.LOGREC and SVC dump, if requested. Notify the system programmer.

System Programmer Response: Obtain the SYS1.LOGREC and the SVC dump, if requested. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: RLM standard diagnostic information is provided in X'D1......' Codes on page 657. This abend reason code is issued by the following CSECT: DSNJR106

00D10347

Explanation: An attempt to notify a peer to force write the log buffer failed.

System Action: DB2 issues a return code of 4 and reason code of 00D10347 to the requesting function.

System Programmer Response: Review the DB2 console for related errors.

Problem Determination: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
00D10348
Explanation: The maximum retry count was exceeded while attempting to read a log RBA.
System Action: The execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.
System Programmer Response: Review the DB2 console for related errors.
Problem Determination: This problem might occur if the user has added an archive log to the BSDS with an incorrect RBA range using Change Log Inventory (DSNJU003) or if an active log dataset has been regressed such that the log dataset does not contain the RBA range that is listed in the BSDS.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

00D10349
Explanation: A deadlock occurred attempting to allocate an archive log tape.
System Action: DB2 issues a return code of 8 and reason code of 00D10349 to the requesting function.
System Programmer Response: Review the DB2 console for the terminated function.
Problem Determination: The requesting function was terminated. There was another function allocating the same archive log tapes. Rerun the terminated function after the present function no longer has the archive log tapes allocated.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

00D10350
Explanation: A lock or unlock failed in an attempt to allocate an archive log tape.
System Action: An execution unit writes a record to SYS1.LOGREC, requests an SVC dump, and then terminates.
Operator Response: Collect all relevant diagnostic materials, including SYS1.LOGREC, an SVC dump, and console output. Notify the system programmer.
System Programmer Response: This is an internal DB2 error, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

00D10402
Explanation: A BSDS read was requested and the input area was too small.
System Action: DB2 returns a return code of 8 and reason code of 00D10402 to the requesting function.
System Programmer Response: Review the DB2 console for related errors.
Problem Determination: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

00D10403
Explanation: A BSDS update was requested and the record was not found.
System Action: DB2 returns a return code of 4 and reason code of 00D10403 to the requesting function.
System Programmer Response: Review the DB2 console for related errors.
Problem Determination: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

00D10404
Explanation: A BSDS insert was requested and the record already exists.
System Action: DB2 returns a return code of 4 and reason code of 00D10404 to the requesting function.
System Programmer Response: Review the DB2 console for related errors.
Problem Determination: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

00D10405
Explanation: A BSDS delete was requested and the record does not exist.
System Action: DB2 returns a return code of 4 and reason code of 00D10405 to the requesting function.
System Programmer Response: Review the DB2 console for related errors.
Problem Determination: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

00D10406
Explanation: The bootstrap data set access service received a request with an invalid function code.
This abend reason code is issued by the following CSECT: DSNJB001
System Action: If this was an unconditional request, an execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.
Operator Response: Collect all relevant diagnostic materials, including SYS1.LOGREC, SVC dump, and console output. Notify the system programmer.
System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 5, 16.

00D10410

Explanation: An unsuccessful completion of a READ BSDS RECORD has occurred. An error has been returned from VSAM.

This abend reason code is issued by the following CSECT: DSNJB002

System Action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

Operator Response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System Programmer Response: Use the SYS1.LOGREC and SVC dump to determine the cause of the problem.

Problem Determination: RLM standard diagnostic information is provided in X'D1......' Codes on page 657 In addition, the VSAM RPL fields RPLERRCD and RPLERREG are stored in the BSDS request parameter list. The address of the BSDS request parameter list is stored in the BSDS request element (BSDSRQEL) field (located at offset X’8’ in the bootstrap data set block).

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 2, 5, 16.

00D10411

Explanation: An unsuccessful completion of a WRITE UPDATE BSDS RECORD has occurred. An error has been returned from VSAM.

This abend reason code is issued by the following CSECT: DSNJB002

System Action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

Operator Response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System Programmer Response: Use the SYS1.LOGREC and SVC dump to determine the cause of the problem.

Problem Determination: RLM standard diagnostic information is provided in X'D1......' Codes on page 657 In addition, the VSAM RPL fields RPLERRCD and RPLERREG are stored in the BSDS request parameter list. The address of the BSDS request parameter list is stored in the BSDS request element (BSDSRQEL) field (located at offset X’8’ in the bootstrap data set block).

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 2, 5, 16.

00D10412

Explanation: An unsuccessful completion of a WRITE INSERT BSDS RECORD has occurred. An error has been returned from VSAM.

This abend reason code is issued by the following CSECT: DSNJB002

System Action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

Operator Response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System Programmer Response: Obtain the SYS1.LOGREC and SVC dump. Determine the cause of the problem from the diagnostic information in the Problem Determination section of this message.

Problem Determination: RLM standard diagnostic information is provided in X'D1......' Codes on page 657 In addition, the VSAM RPL fields RPLERRCD and RPLERREG are stored in the BSDS request parameter list. The address of the BSDS request parameter list is stored in the BSDS request element (BSDSRQEL) field (located at offset 8 in the bootstrap data set block).

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 2, 5, 16.

00D10413

Explanation: An unsuccessful completion of a DELETE BSDS RECORD has occurred. An error has been returned from VSAM.

This abend reason code is issued by the following CSECT: DSNJB002

System Action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

Operator Response: Notify the system programmer.

System Programmer Response: Obtain the SYS1.LOGREC and SVC dump. Determine the cause of the problem from the diagnostic information in the Problem Determination section of this message.

Problem Determination: RLM standard diagnostic information is provided in X'D1......' Codes on page 657 In addition, the VSAM RPL fields RPLERRCD and RPLERREG are stored in the BSDS request parameter list. The address of the BSDS request parameter list is stored in the BSDS request element (BSDSRQEL) field (located at offset 8 in the bootstrap data set block).

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 2, 5, 16.

00D10414

Explanation: DB2 cannot dynamically allocate a copy of the requested bootstrap data set (BSDS).

System Action: The system places the BSDS in disabled mode.

User Response: Notify the system programmer.

System Programmer Response: Restore the BSDS data set (or data sets) and restart the DB2 subsystem associated with the BSDS.
Problem Determination: This reason code is issued by the following CSECT: DSNJB002

00D10415
Explanation: The bootstrap data set (BSDS) is not a valid BSDS for the data sharing group.
System Action: The system places the BSDS in disabled mode.
User Response: Notify the system programmer.
System Programmer Response: Restore the BSDS data set (or data sets) and restart the DB2 subsystem associated with the BSDS.

Problem Determination: This abend reason code is issued by the following CSECT: DSNJB002

00D10416
Explanation: A peer BSDS process was requested in non-data sharing.
System Action: DB2 issues a return code of 8 and reason code of 00D10416 to the requesting function.
System Programmer Response: Review the DB2 console for related errors.
Problem Determination: Peer BSDS requests cannot occur in non-data sharing.
If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

00D10417
Explanation: A peer BSDS process was requested for a host BSDS.
System Action: DB2 issues a return code of 8 and reason code of 00D10417 to the requesting function.
System Programmer Response: Review the DB2 console for related errors.
Problem Determination: Peer BSDS requests cannot be processed for the host BSDS.
If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

00D10500
Explanation: The recovery log manager's dynamic allocation function has been passed a bad function code (LRB4FUNC in control block LRB4).
This abend reason code is issued by the following CSECT: DSNJDS01
System Action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.
Operator Response: Notify the system programmer.
System Programmer Response: Obtain the SYS1.LOGREC and SVC dump. Determine the cause of the problem from the diagnostic information in the Problem Determination section of this message.

Problem Determination: RLM standard diagnostic information is provided in "X'D1......' Codes" on page 657. In addition, trace entry 501 provides the return address to the module that passed the LRB4 with the undefined function code. It also provides the address of the LRB4. This address is also in register 7 at the time of the abend.
Collect the following diagnostic items listed in Appendix B.
"Problem determination" on page 1051 2, 5.

00D10700
Explanation: An error completion code was returned by SETLOCK OBTAIN.
This abend reason code is issued by the following CSECT: DSNJDM002
System Action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.
Operator Response: Notify the system programmer.
System Programmer Response: Obtain the SYS1.LOGREC and SVC dump. Determine the cause of the problem from the diagnostic information in the Problem Determination section of this message.

Problem Determination: RLM standard diagnostic information is provided in "X'D1......' Codes" on page 657. In addition, register 0 contains the return code from SETLOCK OBTAIN.
Collect the following diagnostic items listed in Appendix B.
"Problem determination" on page 1051 2, 5.

00D10701
Explanation: An error completion code was returned by SETLOCK RELEASE.
This abend reason code is issued by the following CSECT: DSNJDM002
System Action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.
Operator Response: Notify the system programmer.

System Programmer Response: Obtain the SYS1.LOGREC and SVC dump. Determine the cause of the problem from the diagnostic information in the Problem Determination section of this message.

Problem Determination: RLM standard diagnostic information is provided in "X’D1......’ Codes" on page 657. In addition, register 0 contains the return code from SETLOCK RELEASE.

Collect the following diagnostic items listed in Appendix B, "Problem determination on page 1051": 2, 5.

00D10800

Explanation: The log manager command processor (DSNJCO01) was entered with an invalid Tokenized Command Segment (TCS).

This reason code is issued by the following CSECT: DSNJCO01

System Action: A diagnostic record is written to SYS1.LOGREC, and an SVC dump is requested. The requesting execution unit is abended.

Operator Response: Collect the SYS1.LOGREC and SVC dump, and notify the system programmer.

System Programmer Response: Obtain the SYS1.LOGREC and the SVC dump from the operator. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: RLM standard diagnostic information is provided under "X’D1......’ Codes" on page 657.

General register 1 contains the address of the TCS as passed to log manager. The character string 'TCS' should appear at the address provided in R1, plus 4. The address of the GCPC Pool Header Block (PHB) is provided in general register 2. The value X’0036’ should appear at the address provided in R2. If these two items are not present, then the DSNJCO01 CSECT was invoked in error by an execution unit.

00D10902

Explanation: A dynamic allocation of a peer's BSDS failed.

System Action: If this was an unconditional request, an execution unit writes a record to SYS1.LOGREC, requests an SVC dump, and terminates.

Operator Response: Collect all relevant diagnostic materials, including SYS1.LOGREC, an SVC dump, and console output of peer and host.

Problem Determination: Review the DB2 system console for possible errors relating the peer's BSDS on both the host and peer DB2 system.

See the DB2 system console for messages DSNJ103I and DSNJ700I that are issued with this DB2 condition code.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

00D10903

Explanation: An open of a peer BSDS failed.

System Action: If this was an unconditional request, an execution unit writes a record to SYS1.LOGREC, requests an SVC dump, and terminates.

Operator Response: Collect all relevant diagnostic materials, including SYS1.LOGREC, an SVC dump, and console output. Notify the system programmer.

Problem Determination: Review the DB2 system console for messages DSNJ100I and DSNJ700I that are issued with this DB2 condition code.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

00D10904

Explanation: There was a VSAM MRKBFR error for a peer BSDS.

System Action: If this was an unconditional request, an execution unit writes a record to SYS1.LOGREC, requests an SVC dump, and terminates.

Operator Response: Collect all relevant diagnostic materials, including SYS1.LOGREC, an SVC dump, and console output.

Problem Determination: The VSAM MRKBFR error is placed in LRB1XRC.

See the DB2 system console for message DSNJ700I that is issued with this DB2 condition code.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

00D10905

Explanation: There is a mismatch between the two BSDS timestamps of a peer.

System Action: If this was an unconditional request, an execution unit writes a record to SYS1.LOGREC, requests an SVC dump, and terminates.

Problem Determination: There is a mismatch between the two BSDS system timestamps of a peer, the BSDS change log
inventory (DSNJU003) timestamps of a peer, or both. The peer log environment might have changed. This must be resolved at the peer DB2 subsystem by determining which BSDS is in error and recovering that BSDS.

See the DB2 system console for message DSNJ700I that is issued with this DB2 condition code.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

---

00D10906

**Explanation:** The change log inventory (DSNJU003) timestamp does not match the system timestamp in the peer BSDS.

**System Action:** If this was an unconditional request, an execution unit writes a record to SYS1.LOGREC, requests an SVC dump, and terminates.

**Problem Determination:** A change log inventory (DSNJU003) job was executed against the peer BSDS after the last peer DB2 subsystem restart. The peer log environment might have changed. Restart the peer DB2 subsystem to reset this condition.

See the DB2 system console for message DSNJ700I that is issued with this DB2 condition code.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

---

00D10907

**Explanation:** DB2 could not locate a peer’s active log data set in the peer’s BSDS.

**System Action:** If this was an unconditional request, an execution unit writes a record to SYS1.LOGREC, requests an SVC dump, and terminates.

**Operator Response:** Collect all relevant diagnostic materials including SYS1.LOGREC, SVC dump, and console output.

**Problem Determination:** Run a print log map (DSNUU004) job against the peer’s BSDS to compare BSDS active log entries with the existing peer’s log data sets. There is probably a mismatch between them.

See the DB2 system console for message DSNJ700I that is issued with this DB2 condition code.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

---

00D10908

**Explanation:** An open of a peer’s active log failed.

**System Action:** If this was an unconditional request, an execution unit writes a record to SYS1.LOGREC, requests an SVC dump, and terminates.

**Operator Response:** Collect all relevant diagnostic materials, including SYS1.LOGREC, SVC dump, and console output of peer and host.

**Problem Determination:** Review the DB2 system console for possible errors relating the peer’s active log on both the host and peer DB2 system.

---

The VSAM CONNECT return code is in LRB1XRC if an SVC dump was taken.

See the DB2 system console for message DSNJ700I that is issued with this DB2 condition code.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

---

00D10909

**Explanation:** There was no active BSDS found for the peer DB2 subsystem.

**System Action:** If this was an unconditional request, an execution unit writes a record to SYS1.LOGREC, requests an SVC dump, and terminates.

**Operator Response:** Collect all relevant diagnostic materials, including SYS1.LOGREC, SVC dump, and console output of peer and host.

**Problem Determination:** Review the DB2 system console for possible errors relating the peer’s BSDSs on both the host and peer DB2 system.

See the DB2 system console for message DSNJ700I that is issued with this DB2 condition code.

The peer BSDSs have been placed in inactive mode. There might have been an error against this peer’s BSDSs and a recovery is needed.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

---

00D10910

**Explanation:** A BLDVRP/DLVRP macro failed for the BSDS buffer.

**System Action:** An execution unit writes a record to SYS1.LOGREC, requests an SVC dump, and then terminates.

**Operator Response:** Collect all relevant diagnostic materials, including SYS1.LOGREC, SVC dump, and console output.

**Problem Determination:** Review the DB2 system console for possible errors relating to the BSDS.

A BLDVRP/DLVRP macro for a VSAM shared resource pool failed for the BSDS. General register 2 will contain a value of 1 for a BLDVRP macro or a value of 2 for a DLVRP macro. The macro return code is contained in general register 3. See the appropriate VSAM publication for advanced VSAM applications.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

---

00D10916

**Explanation:** DB2 received an error while attempting to read shared communications area (SCA) information from the coupling facility.

**System Action:** Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested. The subsystem will be terminated with the same reason code.

**System Programmer Response:** Correct the problem with the coupling facility, and restart DB2.
**Problem Determination:** Review the DB2 system console for possible DSN7xxxx and DSNJxxxx messages that might relate to this problem. If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in [Appendix B. “Problem determination” on page 1051](#): 1, 2, 5.

---

**00D10917**

**Explanation:** DB2 received an error while attempting to write shared communications area (SCA) information to the coupling facility.

**System Action:** Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested. The subsystem will be terminated with the same reason code.

**System Programmer Response:** Correct the problem with the coupling facility, and restart DB2.

**Problem Determination:** Review the DB2 system console for possible DSN7xxxx and DSNJxxxx messages that might relate to this problem. If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in [Appendix B. “Problem determination” on page 1051](#): 1, 2, 5.
X'D3......' Codes

00D30000

Explanation: The operator canceled the allied agent at the requesting location and a dump was requested, or the agent abended with a reason code that indicated a possible communication problem. In either case, the database access agent at this location abended to take a dump to assist in problem determination.

This abend reason code is issued by the following CSECT: DSNLABRT

System Action: The agent terminates.

Operator Response: Notify the system programmer.

System Programmer Response: The information collected as a result of this abend is related to information collected at the requesting location. Obtain a copy of the SYS1.LOGREC listing and the SVC dump. Contact the system programmer at the requesting location (the location name can be determined from the dump header) to coordinate further action.

Problem Determination: This was initiated in order to save diagnostic information that might be useful in problem determination.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 2, 5.

00D30001

Explanation: The DPS RALE was not initialized. The DSNLSPRR was invoked with the DPSB defined as the functional recovery routine (FRR) anchor. The DPSB is created after the DPS RALE is initialized.

System Action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator Response: Notify the system programmer.

System Programmer Response: Determine which sites the abending agent was connected to by examining the DSNL026 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 56, 57.

00D30002

Explanation: The distributed data facility (DDF) standard ESTAE and FRR recovery routines detected a bad recovery element. This is a DB2 internal error.

System Action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator Response: Notify the system programmer.

System Programmer Response: Determine which sites the abending agent was connected to by examining the DSNL026 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 56, 57.
Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 5.

00D30008
Explanation: The distributed transaction manager (DTM) could not allocate a RALE for the distributed data facility (DDF). This is a DB2 internal error.

This abend reason code is issued by the following CSECTs:
DSNLARAL DSNLTACC DSNLTMRA

System Action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator Response: Notify the system programmer.

System Programmer Response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 5.

00D30009
Explanation: During allocation of a database access agent, simultaneous use of an APLE was attempted. An APLE can be used once during allocation of a database access agent. This is a DB2 internal error.

This abend reason code is issued by the following CSECT: DSNLTMRA

System Action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator Response: Notify the system programmer.

System Programmer Response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 5.
00D3000C

Explanation: The location name received in a response message from a responding site disagrees with the location name to which the request message was sent. This is a DB2 internal error.

This abend reason code is issued by the following CSECT: DSNLCTM1

System Action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator Response: Notify the system programmer.

System Programmer Response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B. *Problem determination* on page 1051, 56, 57.

00D3000D

Explanation: A request using application-directed access starting at site 'A' referenced an object at site 'B' that is stored at site 'A'.

This abend reason code is issued by the following CSECT: DSNLTMIG

System Action: The application statement was not processed.

User Response: Recode the application to remove the alias reference at the remote server that resolves to an object stored at the local DB2. Objects stored at the local site must be referenced using a local name.

Problem Determination: If necessary, consult with the data base administrators at the local site and the remote server location. Inspect the remote SYSIBM.SYSTABLES catalog table to determine the object at this location being referenced in a circular manner.

00D3000E

Explanation: The DSNLFTMB macro was invoked to determine whether an update request was sent to a specified location, but the transaction has not yet been migrated to that location. This is a DB2 internal error.

System Action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator Response: Notify the system programmer.

System Programmer Response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B. *Problem determination* on page 1051, 56, 57.

00D3000F

Explanation: A DB2 resource manager attempted to add a duplicate entry to the list of resource managers. This list contains the names of resource managers that can participate in the allocation of a database access agent at a remote site. This is a DB2 error.

This abend reason code is issued by the following CSECT: DSNLADRA

System Action: DB2 writes a SYS1.LOGREC record and requests a SVC dump. The execution unit abends.

Operator Response: Notify the system programmer.

System Programmer Response: Obtain a copy of the SYS1.LOGREC listing and the SVC dump. Determine the failing environment (DB2, IMS, CICS, or TSO). If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The module that incorrectly invoked this function also invoked DSNLADRA.

Collect the following diagnostic items listed in Appendix B. *Problem determination* on page 1051, 1, 2, 5.

00D30010

Explanation: A DB2 resource manager attempted to delete a resource manager that is not given in the list of resource managers that participate in the allocation of a database access agent at a remote site. This is a DB2 internal error.

This abend reason code is issued by the following CSECT: DSNLADRA

System Action: DB2 writes a SYS1.LOGREC record and requests a SVC dump. The execution unit abends.

Operator Response: Notify the system programmer.

System Programmer Response: Obtain a copy of the SYS1.LOGREC listing and the SVC dump. Determine the failing environment (DB2, IMS, CICS, or TSO). Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: This module which incorrectly invoked this function also invoked DSNLADRA.

Collect the following diagnostic items listed in Appendix B. *Problem determination* on page 1051, 1, 2, 5.

00D30011

Explanation: Only a certain number of resource managers can participate in the allocation of a database access agent at a remote site. The maximum has been attained and cannot be extended. This is a DB2 internal error.

This abend reason code is issued by the following CSECT: DSNLADRA

System Action: DB2 writes a SYS1.LOGREC record and requests a SVC dump. The execution unit abends.

Operator Response: Notify the system programmer.
00D30012  •  00D30018

System Programmer Response: Obtain a copy of the SYS1.LOGREC listing and the SVC dump. Determine the failing environment (DB2, IMS, CICS, or TSO). Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 5.

00D30012

Explanation: More than one resource manager attempted to reserve the same RALE for use in the allocation of a database access agent at a remote site. This is a DB2 internal error.

This abend reason code is issued by the following CSECT: DSNLTMIG

System Action: DB2 writes a SYS1.LOGREC record and requests a SVC dump. The execution unit abends.

Operator Response: Notify the system programmer.

System Programmer Response: Obtain a copy of the SYS1.LOGREC listing and the SVC dump. Determine the failing environment (DB2, IMS, CICS, or TSO). Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The RALE was previously reserved by another resource manager and is not available.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 5.

00D30013

Explanation: The facility section (DSN6FAC) in the DB2 initialization parameter module does not exist.

This abend reason code is issued by the following CSECT: DSNLSSRW

System Action: DB2 writes a SYS1.LOGREC record and requests a SVC dump. The distributed data facility is terminated.

Operator Response: Notify the system programmer.

System Programmer Response: This is probably an installation error. Obtain a listing of the DSNZPARM module used.

Problem Determination: Ensure that DSN6FAC was installed correctly.

00D30014

Explanation: The distributed transaction manager (DTM) detected an internal error. This is a DB2 internal error.

This abend reason code is issued by the following CSECTs: DSNLATRN, DSNLBABR, DSNLCMT1, DSNLEDDA, DSNLEDPE, DSNLTS7, DSNLUTRC, DSNLREP, DSNLLSSAB, DSNLSSBP, DSNLSSRC, DSNLTAC1, DSNLTCM1, DSNLTEXC, DSNLTGBK, DSNLTXAC, DSNLM7OK, DSNLM7RA

System Action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator Response: Notify the system programmer.

System Programmer Response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 56, 57.

00D30015

Explanation: The facility section (DSN6FAC) in the DB2 initialization parameter module is invalid.

This abend reason code is issued by the following CSECT: DSNLSSRW

System Action: DB2 writes a SYS1.LOGREC record and requests a SVC dump. The distributed data facility (DDF) is terminated.

Operator Response: Notify the system programmer.

System Programmer Response: This is probably an installation error. Obtain a listing of the DSNZPARM module used.

Problem Determination: Ensure that DSN6FAC was installed correctly.

00D30016

Explanation: An allied agent received an invalid response. This is a DB2 internal error.

This abend reason code is issued by the following CSECT: DSNLCMT1

System Action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator Response: Notify the system programmer.

System Programmer Response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 56, 57.

00D30018

Explanation: An agent exists at the site at which the abend occurred, but an agent that should exist at another site does not exist at that site. This is probably a DB2 internal error.

System Action: DB2 writes a SYS1.LOGREC record and requests a SVC dump. The execution unit abends.

Operator Response: Notify the system programmer.

System Programmer Response: Obtain a copy of the SYS1.LOGREC listing and the SVC dump. Determine the failing environment (DB2, IMS, CICS, or TSO). Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 56, 57.
Problem Determination: The distributed data facility (DDF) error monitor, which terminates the agent that is waiting for some action to be taken by the nonexistent agent, detects this error. The module that was waiting for the action of the nonexistent agent is the module that issued the abend.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051, 1, 2, 5.

00D30019

Explanation: The distributed data facility (DDF) error monitor detected an error at another site which caused the agent at this site to be canceled. This is probably a DB2 internal error.

System Action: DB2 writes a SYS1.LOGREC record and requests a SVC dump. The execution unit abends.

Operator Response: Notify the system programmer.

System Programmer Response: Obtain a copy of the SYS1.LOGREC listing and the SVC dump. Determine the failing environment (DB2, IMS, CICS, or TSO). Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The DDF error monitor, which terminates the agent because of an error detected at another site to which the agent is connected and for which the agent is waiting, detected this error. The module that was suspended to wait for the action to be taken at the other site is the module that issued the abend.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051, 1, 2, 5.

00D3001A

Explanation: A CANCEL THREAD or CANCEL DDF THREAD command naming a distributed thread caused the thread to be terminated. A dump is provided for diagnostic purposes as a result of the CANCEL command DUMP keyword.

System Action: DB2 writes a SYS1.LOGREC record and requests an SVC dump. The execution unit abends. If the canceled distributed thread is an allied thread, DB2 requests the cancelation of each associated database access thread at each of the server sites (refer to the explanation for 00D30000).

Operator Response: Notify the system programmer.

System Programmer Response: The command might have been used to terminate a thread that was in a state where no processing was occurring and the thread could not continue.

If you suspect an internal DB2 error, obtain a copy of the SYS1.LOGREC listing and the SVC dump. Determine the failing environment (DB2, IMS, CICS, or TSO). Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051, 1, 2, 5.

The module that was suspended while waiting for some action to be taken is the module that issued the abend.

00D3001B

Explanation: The database access request from a remote site failed because the SYSIBM.USERNAMES table did not contain an inbound row, the TYPE column specified as an ‘I’ describing what DB2 authorization ID to be used for the remote primary authorization ID. When the USERNAMES column in SYSIBM.LUNAMES specifies ‘I’ or ‘B’, requiring inbound name translation, the SYSIBM.USERNAMES table must contain entries describing which DB2 authorization IDs are to be used for each remote authorization ID from the LU.

This abend reason code is issued by the following CSECTs: DSNLACC, DSNLTMRA.

System Action: The DSNL030I message is issued at the server. The database access agent is not allocated.

Operator Response: Notify the communications database administrator.

System Programmer Response: Make sure the USERNAMES column in SYSIBM.LUNAMES has been specified correctly for the indicated LUNAME. If you intend to use remote authorization IDs that differ from DB2 authorization IDs, verify that the SYSIBM.USERNAMES table has rows that correctly specify the DB2 authorization IDs to be used for each possible remote authorization ID.

Problem Determination: Analyze the SYSIBM.USERNAMES table for an incorrect or missing entry.

00D3001C

Explanation: The database access request from a remote site failed because the SYSIBM.USERNAMES table did not contain an inbound row, the TYPE column specified as an ‘I’ describing what DB2 authorization ID to be used for the remote new user primary authorization ID. When the USERNAMES column in SYSIBM.LUNAMES specifies ‘I’ or ‘B’ requiring inbound name translation, the SYSIBM.USERNAMES table must contain entries describing which DB2 authorization IDs are to be used for each remote authorization ID from the LU.

This abend reason code is issued by the following CSECTs: DSNL030I.

System Action: The DSNL030I message is issued at the server. The database access agent is not allocated.

Operator Response: Notify the communications database administrator.

System Programmer Response: Make sure the USERNAMES column in SYSIBM.LUNAMES has been specified correctly for the indicated LUNAME. If you intend to use remote authorization IDs that differ from DB2 authorization IDs, verify that the SYSIBM.USERNAMES table has rows that correctly specify the DB2 authorization IDs to be used for each possible remote authorization ID.

Problem Determination: Analyze the SYSIBM.USERNAMES table for an incorrect or missing entry.
Problem Determination: Determine the server being accessed by examining the SQLError -30041 message text. Refer also to the DDM documentation of the ACCRDBRM command and the ACCRDBRM reply message.

00D30020

Explanation: The processing of the CONNECT statement at a remote server has failed. This is because acceptable CONNECT information was not conveyed in the distributed relational database architecture (DRDA) EXCSAT command sent by the local DB2 to the remote server.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: This represents a DRDA configuration mismatch between the local DB2 and the remote server. The precise mismatch is determined from the reply message sent from the remote server to the local DB2. The reply message may be determined by examining the SQLError and the SQLCA tokens returned for the CONNECT statement.

System Programmer Response: The remote server database access agent (DBAA) sends a DRDA reply message (for example, MGRVLVRM) to the local DB2 which indicates the specific nature of the problem. The above reason code is sent in the server diagnosis area of the reply message. The DBAA awaits further DRDA commands from the local DB2.

Operator Response: Notify the communications database administrator.

System Programmer Response: Make sure the USERNAMES column in SYSIBM.LUNAMES has been specified correctly for the indicated LUNAME. If you intend to use remote authorization IDs that differ from the DB2 authorization IDs, verify that the SYSIBM.USERNAMES table contains entries describing which DB2 authorization IDs are to be used for each remote authorization ID from the LU.

Problem Determination: Analyze the SYSIBM.USERNAMES table for an incorrect or missing entry.

00D3001E

Explanation: The SYSTEM PARAMETER section (DSN6SYSYP) in the DB2 installation parameter module does not exist.

This abend reason code is issued by the following CSECT: DSNLTMIN

System Action: A record is written to SYS1.LOGREC, and an SVC dump is requested. DDF is terminated.

Operator Response: Notify the system programmer.

System Programmer Response: This is probably an installation error. Obtain a listing of the DSNZPARN module used.

Problem Determination: Ensure that DSN6SYSYP was installed correctly.

00D3001F

Explanation: ACCRDBRM received from the remote server indicates incompatible server.

This abend reason code is issued by the following CSECT: DSNLTAIC1

System Action: The TYPDEFNAM or TYPDEFOVR values returned from the remote server in the DDM ACCRDBRM reply require data type and/or code page translations that cannot be supported by the local DB2. The local DB2 has disconnected the conversation with the remote server. DB2 requests neither a SVC dump nor a SYS1.LOGREC record.

User Response: Notify the system programmer. Invoke the application after the problem has been corrected.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem. Notify the system programmer at the remote location that the remote server may not be usable.

Problem Determination: The database access request from a remote site failed because the SYSIBM.USERNAMES table did not contain an inbound row, the TYPE column specified as an 'I' describing what DB2 authorization ID to be used for the remote plan owner authorization ID. When the USERNAMES column in SYSIBM.LUNAMES specifies 'I' or 'B', requiring inbound name translation, the SYSIBM.USERNAMES table must contain entries describing which DB2 authorization IDs are to be used for each remote authorization ID from the LU.

This reason code is issued by the following CSECT: DSNLTLMRA

System Action: The DSNL030I message is issued at the server. The database access agent is not allocated.

Operator Response: Notify the communications database administrator.

System Programmer Response: Make sure the USERNAMES column in SYSIBM.LUNAMES has been specified correctly for the indicated LUNAME. If you intend to use remote authorization IDs that differ from the DB2 authorization IDs, verify that the SYSIBM.USERNAMES table contains entries describing which DB2 authorization IDs are to be used for each possible remote authorization ID.

Problem Determination: Analyze the SYSIBM.USERNAMES table for an incorrect or missing entry.

00D30021

Explanation: The processing of the CONNECT statement at a remote server has failed. This is because acceptable CONNECT information was not conveyed in the distributed relational database architecture (DRDA) EXCSAT command sent by the local DB2 to the remote server.

This reason code is issued by the following CSECT: DSNLTACC

System Action: The remote server database access agent (DBAA) sends a DRDA reply message (for example, MGRVLVRM) to the local DB2 which indicates the specific nature of the problem. The above reason code is sent in the server diagnosis area of the reply message. The DBAA awaits further DRDA commands from the local DB2.

User Response: The SQLCA returned in response to the CONNECT statement indicates what DRDA reply message was sent by the remote server. The user should contact the local DB2 system administrator with this information.

Operator Response: Operator will not detect this problem.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: This represents a DRDA configuration mismatch between the local DB2 and the remote server. The precise mismatch is determined from the reply message sent from the remote server to the local DB2. The reply message may be determined by examining the SQLError and the SQLCA tokens returned for the CONNECT statement.

The remote server and local DB2 system administrators should consult together to determine if this is a system configuration error, or if an internal error exists at either the local DB2 or remote server.

Collect the following diagnostic items listed in Appendix B, Problem determination on page 1051: 1, 5.

Collect the following local DB2 diagnostic items:
- Application source code and runtime listing.
- Relevant error and system logs spanning the time of the failure.
00D30022  •  00D3002E

**User Response:** The SQLCA returned in response to the CONNECT statement indicates what DRDA reply message was sent by the remote server. The user should contact the local DB2 system administrator with this information.

**Operator Response:** Operator will not detect this problem.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** This represents a DRDA configuration mismatch between the local DB2 and the remote server. The precise mismatch is determined from the reply message sent from the DB2 remote server to the local DB2. The reply message may be determined by examining the SQLCODE and the SQLCA tokens returned for the CONNECT statement. It could indicate any one of the following problems (but is not limited to these):

- The EXCSAT command was not successfully processed prior to receipt of the ACCRDB command.
- The TYPEDFNMAM parameter (specifies local DB2 data types) in the ACCRDB command is not supported.
- The TYPEDFOVR parameter (specifies local DB2 CCSIDs) in the ACCRDB command is not supported.
- The local DB2 product is not recognized/supported by the remote server.

The system administrators for the two locations should consult together to determine if this is a system configuration error or if an internal error exists at either location.

Collect the following diagnostic items at the remote server:

- Console output from the system on which the job was run and a listing of SYSLOG data set for the period of time spanning the failure.
- Listing of SYS1.LOGREC data set obtained by executing IFCEREP1.
- The system CCSIDs.

Collect the following diagnostic items at the local DB2:

- Application source code and runtime listing.
- Relevant error and system logs spanning the time of the failure.
- The system CCSIDs.

**Problem Determination:** Either the user does not have the proper authority to execute at the remote server, or there is a security configuration mismatch between the local DB2 and the remote server. Examine the DSNL030I message or the alert for a more specific reason code describing the failure. Consult with the two system administrators if necessary to fix the problem. No dump is generated for this abend.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 5.

---

**00D3002D**

**Explanation:** The remote server was not successfully connected. The SYSIBM.USERNAMES table did not contain an outbound row, the TYPE column specified as an 'O' describing the remote authorization identifier to be used for the plan owner DB2 authorization ID. When the USERNAMES column in SYSIBM.LUNAMES specifies 'O' or 'B' requiring outbound name translation, the SYSIBM.USERNAMES table must contain entries describing the remote authorization IDs to be used for each DB2 authorization ID communicating with the LU.

This abend reason code is issued by the following CSECTs: DSNLTXAC DSNLTMIG

**System Action:** A resource unavailable is returned to the application. The request is not sent to the remote site.

**Operator Response:** Notify the communications database administrator.

**System Programmer Response:** Make sure the USERNAMES column in SYSIBM.LUNAMES has been specified correctly for the indicated LUNAME. If you intend to use remote authorization IDs that differ from DB2 authorization IDs, verify that the SYSIBM.USERNAMES table has rows that correctly specify the remote authorization ID to be used for each possible DB2 authorization ID.

**Problem Determination:** Analyze the SYSIBM.USERNAMES table for an incorrect or missing entry.

---

**00D3002E**

**Explanation:** No resync list entry exists during resynchronization when one is expected to exist. This is an internal error.

This abend reason code is issued by the following CSECTs:

DSNLTRLA DSNLTRL0 DSNLTRPA DSNLTRPH

**System Action:** A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Determine the sites to which the abending agent was connected by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 56, 57.
**00D3002F**

**Explanation:** An unrecognized function request was detected during resynchronization. This is an internal error.

This abend reason code is issued by the following CSECTs:

DSNLTRD DSNLTER DSNLTRL DSNLTRR

**System Action:** A record is written to SYS1.LOGREC and a SVC dump is requested at the site of the DB2 abend.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Determine the sites to which the abending agent was connected by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

Refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051, 56, 57.

---

**00D30030**

**Explanation:** This site is not considered a coordinator or participant during resynchronization. This is an internal error.

This abend reason code is issued by the following CSECTs:

DSNLTE DSNLTRLO DSNLTPV DSNLTVS

**System Action:** A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Determine the sites to which the abending agent was connected by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

Refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051, 56, 57.

---

**00D30031**

**Explanation:** An unknown 2-phase COMMIT protocol is being used during resynchronization. This is an internal error.

This abend reason code is issued by the following CSECTs: DSNLTRLR DSNLTVS

**System Action:** A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

**Operator Response:** Notify the system programmer.

---

**00D30032**

**Explanation:** This site is not considered either an initiator or recipient of resynchronization. This is an internal error.

This abend reason code is issued by the following CSECTs:

DSNLTRCN DSNLTRLA DSNLTRLN DSNLTPA

**System Action:** A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Determine the sites to which the abending agent was connected by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

Refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051, 56, 57.

---

**00D30033**

**Explanation:** This site is invalidly an initiator of resynchronization. This is an internal error.

This abend reason code is issued by the following CSECT: DSNLTRA

**System Action:** A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Determine the sites to which the abending agent was connected by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

Refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051, 56, 57.
00D30034

Explanation: An INDOUBT resync list entry does not have the correct associated structures during resynchronization. This is an internal error.

This abend reason code is issued by the following CSECTs: DSNLTRPA DSNLTRPN

System Action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator Response: Notify the system programmer.

System Programmer Response: Determine the sites to which the abending agent was connected by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 56, 57.

00D30035

Explanation: A resolved unit of work still has internal structures associated with it during resynchronization. This is an internal error.

This abend reason code is issued by the following CSECTs: DSNLTRPA DSNLTRPN

System Action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator Response: Notify the system programmer.

System Programmer Response: Determine the sites to which the abending agent was connected by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 56, 57.

00D30036

Explanation: Either the coordinator or participant has an invalid status during resynchronization. This is an internal error.

This abend reason code is issued by the following CSECTs: DSNLTRLA DSNLTRCA DSNLTRLC DSNLTRLN DSNLTRLN DSNLTRLN

System Action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator Response: Notify the system programmer.

System Programmer Response: Determine the sites to which the abending agent was connected by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 56, 57.

00D30037

Explanation: The resync list latch is erroneously still being held during resynchronization. This is an internal error.

This abend reason code is issued by the following CSECT: DSNLTRTR

System Action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator Response: Notify the system programmer.

System Programmer Response: Determine the sites to which the abending agent was connected by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 56, 57.

00D30038

Explanation: The storage calculation for the amount of storage needed for -DISPLAY THREAD is invalid. This is an internal error.

This abend reason code is issued by the following CSECT: DSNLTDTI

System Action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator Response: Notify the system programmer.

System Programmer Response: Determine the sites to which the abending agent was connected by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 56, 57.
00D30039

**Explanation:** A resync conversation is invalid. This is an internal error.

This abend reason code is issued by the following CSECT: DSNLTTRV

**System Action:** A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Determine the sites to which the abending agent was connected by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 56, 57.

00D3003A

**Explanation:** An error occurred during resynchronization. This is an internal error.

This abend reason code is issued by the following CSECTs: DSNLTRLA, DSNLTRLN, DSNLTRLRA, DSNLTRPC, DSNLTRLN, DSNLTRLA

**System Action:** A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Determine the sites to which the abending agent was connected by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 56, 57.

00D3003B

**Explanation:** A distributed thread was canceled because the timeout value in the DB2 startup parameters module (usually DSNZPARM) was exceeded. This value is specified by the IDLE THREAD TIMEOUT value in the DSNTIPR installation panel or the IDHTONI value in the DSNS6FAC macro, which is used to build the DB2 start up parameters module.

**System Action:** The execution unit abends.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** The server thread was holding DB2 resources and the requester application did not make a request to the DB2 server thread for an extended period of time. The server thread is terminated in order to releases resources that might affect other threads.

This usually occurs for one of these reasons:

- The ACTIVE thread option was specified in the DDF THREADS field of the DSNTIPR installation panel, and a requester application or its user did not make a request to the DB2 server for an extended period. This can happen, for example, during a lengthy end user absence. As a result, the server thread becomes susceptible to being canceled because of the timeout value.

Determine why the requester application has not made a request to the DB2 server in the specified time. If the design or use of the application requires additional time, increase the IDLE THREAD TIMEOUT value or set it to zero to deactivate the function.

- The INACTIVE thread option was specified in the DDF THREADS field of the DSNTIPR installation panel, and a requester application or its user:
  - Failed to commit before an extended dormant period (such as end user absence), or
  - Committed before an extended dormant period (such as end user absence), but database resources are still held because of other existing conditions.

As a result, the server thread cannot be moved to the inactive state and becomes susceptible to being canceled because of the timeout value.

Determine why the server thread was not moved to the inactive state. For information about active and inactive threads, see the description of the DDF THREADS option of the DSNTIPR installation panel in “Planning and Installing DB2” in Section 2 of DB2 Installation Guide. If the design or use of the application requires additional time, increase the IDLE THREAD TIMEOUT value or set it to zero to deactivate the function.

**Problem Determination:** This abend reason code is issued by the following CSECT: DSNLBABR

00D300F1

**Explanation:** The DSNLTOKS macro was invoked to extract error information from the DTMF block using the CHECK_SQLCODE keyword and the DTMF block was either uninitialized or contained an SQL return code that was not negative. This is a DB2 internal error.

**System Action:** A record is written to SYS1.LOGREC and an SVC dump is requested. The execution unit is abnormally terminated.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** This is a DB2 internal error. Obtain a copy of SYS1.LOGREC and the SVC dump. Determine the failing environment (DB2, IMS, CICS, or TSO). Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** This name of the module that invoked the function given as the abending module name. This is not the module in error. An earlier failing module neglected to report error information in the DTMF block.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2, 5.
00D300F2

**Explanation:** EXCSATRD reply received from a remote server indicates an incompatible server.

This abend reason code is issued by the following CSECT: DSNLTEX1

**System Action:** The manager levels returned from the local DB2 in the DDM EXCSATRD reply were too low for the local DB2 to support. The local DB2 has disconnected the conversation with the remote server. DB2 requests neither an SVC dump nor a SYS1.LOGREC record written.

**User Response:** Notify the system programmer. Invoke the application after the problem has been corrected.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem. Notify the system programmer at the remote location that the remote server is not usable.

**Problem Determination:** Determine the server being accessed by inspecting the SQLCODE -30041 message text. Refer to the DDM documentation of the EXCSAT command.

00D300F3

**Explanation:** The remote server was not successfully connected. The SYSIBM.USERNAMES table did not contain an outbound row, the TYPE column specified as an ‘O’ describing the remote authorization identifier to be used for the new user primary DB2 authorization ID. When the USERNAMES column in SYSIBM.LUNAMES specifies ‘O’ or ‘B’ requiring outbound name translation, the SYSIBM.USERNAMES table must contain entries describing the remote authorization IDs to be used for each DB2 authorization ID communicating with the LU.

This abend reason code is issued by the following CSECTs: DSNLTMIG DSNLTXAC

**System Action:** A resource unavailable is returned to the application. The request is not sent to the remote site.

**Operator Response:** Notify the communications database administrator.

**System Programmer Response:** Make sure the USERNAMES column in SYSIBM.LUNAMES has been specified correctly for the indicated LUNAME. If you intend to use remote authorization IDs that differ from DB2 authorization IDs, verify that the SYSIBM.USERNAMES table has rows that correctly specify the remote authorization ID to be used for each possible DB2 authorization ID.

**Problem Determination:** Analyze the SYSIBM.USERNAMES table for an incorrect or missing entry.

00D300F4

**Explanation:** A DRDA protocol error occurred. Either a reply chain is broken but there is no DDM reply with a high enough severity to break the chain, or a message chain is unbroken in spite of a high severity code, or a conversation expected to be available has terminated. The problem, though detected by DB2, is believed to have originated at the remote server. The server might not be a DB2 subsystem.

This abend reason code is issued by the following CSECTs: DSNLBABR DSNLCMT1 DSNLTXAC DSNLTAC1 DSNLTEX1

**System Action:** This reason code is returned to the application. A request message has likely been sent to the remote site but the outcome is uncertain. A DSNLO31I message may have been written to the console. Refer to the description of this message for more information. If this reason code is returned for an SQL ‘COMMIT’ statement, determine if manual recovery of the unit of work is necessary.

**Operator Response:** Notify the operator or systems programmer for the remote server.

**System Programmer Response:** Determine the product type of the server. The DISPLAY THREAD command may be used. Refer to the server products’ diagnostic recommendations. If the server DBMS is DB2, contact your IBM representative to report the problem and open an APAR.

**Problem Determination:** The problem originated with the remote server. Follow the diagnostic recommendations published for the server DBMS product, which might not be DB2.

00D300F5

**Explanation:** DDM command chaining is in use.

This reason code is issued by the following CSECT: DSNLTXAC

**System Action:** The DTM module returns to its invoker with a return code = 4.

00D300F6

**Explanation:** A valid but unexpected DDM reply was received from a remote server during a connect, commit, or abort operation. For a connect, the expected DDM reply is EXCSATRD (for EXCSAT command) or ACCRDBRM (for ACCRDB command). For a commit or abort, the expected DDM reply is ENDUOWRM. (The DDM command for a commit is RDBCMM. For a rollback, it is RDBRLLBCK).

This reason code is issued by the following CSECTs: DSNLBABR DSNLCMT1 DSNLTXAC DSNLTAC1 DSNLTEX1

**System Action:** The local DB2 tried to access a remote server and the server replied with an unexpected DDM answer. The remote server may have suffered permanent damage. The local DB2 may or may not subsequently disconnect the conversation to the server. This is an internal-only DDF reason code. The local DB2 requests neither a SVC dump nor a SYS1.LOGREC record.

**User Response:** Contact the system programmer

**System Programmer Response:** If the SQLCA is available, examine all fields in the SQLCA. Using this information, try to determine what DDM reply was received. Contact the system programmer at the server site with this information. This is probably a programming error at the server database system, although it may be a DB2 error. The server database system may have recorded diagnostic information for the problem. If this is a DB2 error, write an APAR.

**Problem Determination:** Examine the SQL return code in the SQLCA. It should give further indication of the real cause.

00D300F7

**Explanation:** A DDM reply message was too big to fit in the DTM reply buffer.

This abend reason code is issued by the following CSECTs:
Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 5.

System Action: The requesting allied agent is terminated. A SYS1.LOGREC record is written and an SVC dump is requested at the local DB2.
Operator Response: Notify the system programmer.
System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Problem Determination: This error should never occur. Write an APAR.

00D300F8
Explanation: An attempt was made to access data at a remote location which has been started in restricted access mode. No remote access is allowed.
This abend reason code is issued by the following CSECT: DSNLAGNT
System Action: The attempt to create the database access thread is rejected.
Operator Response: Notify the system programmer.
System Programmer Response: Determine the remote location where the remote data access was attempted. Retry the request when the remote location has been restarted in full access mode.

00D300F9
Explanation: The DB2 server was unable to allocate a database access agent since the maximum number allowed was zero (ZPARM MAXDBAT value was zero).
This abend reason code is issued by the following CSECT: DSNLAGNT
System Action: The DB2 server terminates the conversation with a D84B6031 SNA sense code for application-directed access and a 00D300F9 DB2 code for system-directed access. A DSNL030I message containing this reason code is written to the MVS operator console at the DB2 server site.
System Programmer Response: At the server, currently no database access agents are allowed because the MAXDBAT value in the ZPARM is zero. If access to this site from a remote site is desirable, change the MAXDBAT parameter in ZPARM to the maximum number of database access agents desired. Restart DB2 at the server. Notify the user to rerun the application.

00D300FA
Explanation: You attempted a COMMIT statement for a plan that specified ISOLATION (RR) and update operations were performed either at the local site or at a remote site. The COMMIT operation could not be performed because the COMMIT request could not be transmitted to a remote site where Repeatable Read operations had been performed.
This abend reason code is issued by the following CSECT: DSNLCMT1
System Action: All update operations were backed out.
System Programmer Response: Determine why the COMMIT failed and retry the application.

00D300FB
Explanation: A resource was not available during database access agent allocation at a remote site.
This abend reason code is issued by the following CSECTs: DSNLTMRA
System Action: The allocation of the database access agent was unsuccessful. A 'resource not available' code is returned to the user. DB2 requests neither a SVC dump nor a SYS1.LOGREC record.
User Response: Notify the system programmer. Invoke the application after the problem has been corrected.
System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Problem Determination: Determine the name of the resource being allocated and correct the problem.

00D300FC
Explanation: You attempted to allocate a resource at a remote site using an invalid name.
This abend reason code is issued by the following CSECTs: DSNLTMRA
System Action: The allocation of the database access agent was unsuccessful. A 'resource not available' code is returned to the user. DB2 requests neither a SVC dump nor a SYS1.LOGREC record. This reason code is returned only for system-directed access (DSNLTMRA).
User Response: Notify the system programmer. Invoke the application after the problem has been corrected.
System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Problem Determination: Determine the resource being allocated and correct the problem.

00D300FD
Explanation: An attempt was made to disconnect a connection with a specified location, but the transaction has not yet been connected to that location. This is a DB2 internal error.
System Action: A record is written to SYS1.LOGREC and an SVC dump is requested. The execution unit is abnormally terminated.
Problem Determination: Obtain a copy of SYS1.LOGREC and the SVC dump. Determine the failing environment (DB2, IMS, CICS, or TSO). Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
The name of the module that invoked the function incorrectly is given as the abending module name.
Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 5.
**00D300FE**

**Explanation:** You executed a COMMIT statement and update operations were performed at a remote site. The success of the COMMIT operation could not be determined because a failure occurred at the remote site or in the communication link with the remote site after the request to commit the operation had been transmitted.

This abend reason code is issued by the following CSECT: DSNLCMT1

**System Action:** The remote updates have been committed or backed out, depending on when the error occurred.

**User Response:** After communication has been reestablished with the remote site, use SQL to query the updated data to determine whether the updates were committed. If the updates were not committed, rerun the application and perform the updates again.

**Problem Determination:** Determine why the COMMIT failed and retry the application.

---

**00D300FF**

**Explanation:** You attempted a COMMIT statement and update operations were performed at a remote site. The attempt failed.

This abend reason code is issued by the following CSECT: DSNLCMT1

**System Action:** The updates at the remote site have been backed out.

**User Response:** Rerun the application.

**Problem Determination:** The remote server system programmer may need to collect the following remote server diagnostic items:

- Relevant error and system logs spanning the time of the failure.
- Any relevant remote server dumps.

**00D30101**

**Explanation:** A COMMIT was attempted but failed due to a prior error. Communications to a remote site have been lost. The COMMIT operation cannot be performed because the COMMIT request could not be transmitted to a remote site. If the program has performed updates, the updates have been backed out to the prior COMMIT point.

This reason code is issued by the following CSECT: DSNLCMT1

**System Action:** All update operations were backed out.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Restart DDF at the affected sites and rerun the application.

---

**00D30103**

**Explanation:** A COMMIT statement was chained to a set of commands sent to an remote server. The remote server stopped processing the chained commands before it reached the COMMIT. COMMIT was NOT performed.

This reason code is issued by the following CSECT: DSNLCMT1

**System Action:** Any updates performed within the current unit of Work have been backed out.

**User Response:** Notify the system programmer of the failure. After the problem causing the chain to be broken at the remote server is fixed, rerun the application and perform the updates again.

**Operator Response:** Operator will not detect this problem.

**System Programmer Response:** See “Problem Determination” section below.

**Problem Determination:** Collect the following diagnostic items from the local DB2 system.

- Listing of application program and output from application program.
- Console output and a listing of SYSLOG data set for the period of time spanning the failure.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

Consult with the remote server system programmer to determine the cause of the error.

The remote server system programmer may need to collect the following remote server diagnostic items:

- Relevant error and system logs spanning the time of the failure.
- Any relevant remote server dumps.
• User’s application output, including SQLCAs returned for each SQL statement.

00D30104

Explanation: The unit-of-work disposition (commit or rollback) received from a DRDA server is inconsistent with the command sent (commit or rollback), and the SQL code returned from the server. For example, if a commit is sent to the server, and the reply message indicates the unit of work (UOW) was committed, but the SQL code returned is negative, then this reason code will be contained in the alert sent to NetView.

This reason code is issued by the following CSECTs:
DSNLCMIT1 DSNLBABR.

System Action: An alert is generated and sent to NetView. Two trace records, IFCID 0191 and IFCID 0193, may be written to the Statistics Class 4 trace, and two DSNL031I messages may be written to the console. The trace records and messages will not be written if this error was previously detected within the last 5 minutes. The Statistics Class 4 trace must be active for the trace records to be written.

An SQLCODE +30100, -30020, or -30030 is returned to the application. An SQLCODE -30020 indicates a rollback was sent to the DRDA server, but a commit unit-of-work disposition was received. An SQLCODE +30100 or -30030 conveys the unit-of-work disposition reported by the server, and replaces the original SQL return code sent by the server, which was not consistent with the UOW disposition. The original SQL return code and SQLSTATE returned by the server are saved as tokens in the SQLCA.

Operator Response: Notify the system programmer.

System Programmer Response: This is a DRDA distributed protocol problem. Once the nature of the inconsistency is known, the server system programmer may have to be contacted to help resolve the problem. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items:

• Listing of the user's application program output, including printouts of the SQLCAs received for all SQL statements.
• Console output from the system on which the job was run, and a listing of SYSLOG data set for the period of time spanning the failure.
• Listing of the Statistics Class 4 trace records for the LUWID associated with the failing request.

If no DSNL031I messages were written at the same time as the alert, then scan the log backwards for previous DSNL031I messages. A DB2 filter function prohibits multiple occurrences of the same problem detected within a 5 minute period from flooding the console and trace data set with diagnostic information. You will have to find an earlier occurrence of the same problem to start diagnosing it.

Once you have found the two DSNL031I messages, locate the IFCID 0191 and 0193 trace records written for the problem by using the IFCID sequence numbers from the DSNL031I messages.

The IFCID 0193 trace record will document the nature of the inconsistency (command sent, UOW disposition received, SQL return code received).

The IFCID 0191 trace record will document the exact data stream returned from the Server. Use this information to determine if the reply message from the server was correctly converted into the UOW disposition and the SQL return code reported in the IFCID 0193 record. If the data stream was correctly converted, then the problem lies at the server and you should contact a system programmer at the server and have him or her analyze the data stream produced by the server.

00D30105

Explanation: A distributed commit has failed because the allied agent was cancelled as a result of a STOP DDF MODE(FORCE) command during a previous execution of DDF which has terminated. When an allied agent does not issue database requests for more than 2 minutes after a STOP DDF MODE(FORCE) command is issued, DDF will come down without terminating the allied agent. The agent is cancelled when it makes its next request to DB2.

This reason code is issued by the following CSECT:
DSNLCMIT1

System Action: The commit operation is failed and the agent is cancelled. The last unit of work was rolled back at all server systems when the STOP DDF MODE(FORCE) command was processed.

User Response: Contact the operator to re-start DDF. After DDF is re-started, continue your application's work starting with the last unit of work that was rolled back.

Operator Response: Re-start DDF.

00D30106

Explanation: The result of a DRDA distributed commit could not be determined because the reply message from the server either was invalid or could not be deciphered.

This reason code is issued by the following CSECT:
DSNLCMIT1

System Action: An alert is generated and sent to NetView. An IFCID 0191 trace record may be written to the statistics class 4 trace, and a DSNL031I message may be written to the console. The trace record and message will not be written if this error was previously detected within the last 5 minutes. The statistics class 4 trace must be active for the trace records to be written.

The requester disconnects from the server system. The state of the unit of work at the server is unknown. It may have been committed, or it may have been rolled back. An SQLCA indicating the nature of the DRDA reply message distortion is given to the application.

User Response: Notify the system programmer. After the problem has been resolved, re-connect to the server site to determine whether the last unit of work was committed or rolled back. Continue your application after correcting the server database (if necessary).

Operator Response: Notify the system programmer whenever a DSNL031I message is written to the MVS console.

System Programmer Response: This is a DRDA distributed protocol problem. Once the nature of the problem is known, the server system programmer may have to be contacted to help resolve the problem.
If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items:

- Listing of the user's application program output, including printouts of the SQLCAs received for all SQL statements.
- Console output from the system on which the job was run, and a listing of SYSLOG data set for the period of time spanning the failure.
- Listing of the statistics class 4 trace records.

If no DSNL031I message was written at the same time as the alert, then scan the log backwards for a previous DSNL031I message. A DB2 filter function prohibits multiple occurrences of the same problem detected within a 5 minute period from flooding the console and trace data set with diagnostic information. You will have to find an earlier occurrence of the same problem to start diagnosing it.

Once you have found the DSNL031I message, locate the IFCID 0191 trace record written for the problem by using the IFCID sequence number from the DSNL031I message.

The IFCID 0191 trace record will document the exact data stream returned from the server. Use this information to determine if the reply message from the Server was correct, and if so, the error resides with the DB2 AR.

If the data stream is incorrect, then the problem lies at the server and you should contact the system programmer at the server and have he or she analyze the data stream produced by the server.

00D30109

Explanation: Phase 1 of a distributed commit failed. One or more remote servers did one of the following:

- Voted NO
- Voted heuristic mixed
- Experienced a communications error
- Made an error in their use of commit protocol

This reason code is issued by the following CSECT: DSNLCMT1

System Action: The commit fails. The unit of work is backed out.

For communication errors, message DSNL406I is written to the system console, alert A006 is generated, and trace record IFCID 0209 is produced to record the server affected (LUWID of the unit of work, and other information).

For protocol errors, message DSNL413I is written to the system console, alert A005 is generated, and trace record IFCID 0208 is produced to describe the nature of each server's protocol violation.

User Response: Contact the DB2 systems programmer. If the commit failed for other than a commit protocol violation by a remote server, resubmit your application. Otherwise, wait for resolution of the protocol error.

System Programmer Response: For protocol errors, contact the system programmer for the remote site. The invalid sync point message is recorded in the IFCID 0208 trace record. The system logic error that causes the invalid sync point message must be corrected at the remote site.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1.

00D3010A

Explanation: This might occur when a version of IMS that does not support the COMMIT VERIFY exit is running an IMS MODE=MULTI application with one or more non-DB2 servers. This is probably a user error, since this scenario is not supported by DB2 and IMS unless the IMS version is 4 or later.

IMS requested a new user SIGNON without an immediately preceding commit or abort, and your application was connected to one or more remote non-DB2 servers. In order to preserve the consistency of database updates made at several different servers, when at least one server is a non-DB2 server, a commit or abort must precede any new user SIGNON.

This reason code is issued by the following CSECT: DSNLXNEW

System Action: The execution unit writes a record to SYS1.LOGREC. No dump is requested. The IMS application terminates as a result of the abend.

Operator Response: Collect the SYS1.LOGREC. Notify the system programmer.

System Programmer Response: Determine if the IMS version and release being used invokes the DB2 COMMIT VERIFY exit, which is available in DB2 Version 3 and later. Obtain the SYS1.LGREC.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1.

00D3010B

Explanation: Cached information was used to determine whether updates are allowed at the server. From the time of the execution of the CONNECT statement to the time that the first SQL statement was sent to the server, the conversation SYNC_LEVEL supported by the partner changed from a cached value of SYNC to the current of value NONE.

SYNC_LEVEL NONE servers are not allowed to update in the current unit of work. Since an update might have been performed by the partner during execution of the first statement at the server, the application must roll back (abort).

This reason code is returned as a token in the SQLCODE -904.

This reason code is issued by the following CSECT: DSNLTMAC1

System Action: The connection to the server is deallocated. The server's portion of the current unit of work is rolled back at the server. The application is placed in a must-abort state. All subsequent operations except rollback or abort fail with an SQLCODE -918. The remainder of the current unit of work is backed out when rollback or abort is performed or when the application terminates.

User Response: If your application does not do any work at a server for a long time after issuing a CONNECT, consider rewriting it to perform the CONNECT immediately before per-
forming any work at the server. This minimizes the possibility of the server system going down and coming back up at a different SYNCE_LEVEL.

Rerun your application starting with the unit of work containing the SQL statement that received an SQLCODE -904.

**00D3010C**

**Explanation:** Cached information was used to determine whether updates are allowed at the server. From the time of the execution of the CONNECT statement to the time that the first SQL statement was sent to the server, the partner was started with a program that does not support two-phase commit.

Such servers are not allowed to update in the current unit of work. Since an update might have been performed by the partner during execution of the first statement at the server, the application must roll back.

This reason code is returned as a token in the SQLCODE -904.

This reason code is issued by the following CSECT: DSNLTAC1

**System Action:** The connection to the server is deallocated. The server's portion of the current unit of work is rolled back at the server. The application is placed in a must-abort state. All subsequent operations except rollback or abort fail with an SQLCODE -918. The remainder of the current unit of work is backed out when rollback or abort is performed or when the application terminates.

**User Response:** If your application does not do any work at a server for a long time after issuing a CONNECT, consider rewriting it to perform the CONNECT immediately before performing any work at the server. This minimizes the possibility of the server system going down and coming back up at a different level.

Rerun your application starting with the unit of work containing the SQL statement that received the SQLCODE -904.

**00D3010D**

**Explanation:** DB2 requested updates at multiple servers, but at least one server does not support distributed two-phase commit.

This reason code is issued by the following CSECT: DSNLCTM1

**System Action:** The commit fails for this unit of work (UOW). If the application is using TSO or BATCH attach, then DB2 rolls back the UOW. If the application is using CICS or IMS attach, then CICS or IMS rolls back the UOW after receiving the NO commit vote from DB2.

**User Response:** Change the application so that updates to multiple servers (including the local server) are not performed within a single UOW unless all the update servers in the UOW support distributed two-phase commit.

**Problem Determination:** In the UOW that was not committed, the first SQL statement that performed an update that was not allowed received an SQLCODE -919. All subsequent SQL statements also received an SQLCODE -919 until a ROLLBACK or a static ROLLBACK SQL statement was executed (if either occurred).

---

**00D3010E**

**Explanation:** The DRDA server system does not support the authentication mechanism specified in the communications database. For example, the communications database specified that RACF passtickets were supposed to be used, but the server does not support it.

**System Action:** The attempt to access the remote server fails. An SQLCODE -30073 is returned to the application.

**User Response:** Notify the system programmer.

**System Programmer Response:** Modify the row in SYSIBM.LUNAMES or SYSIBM.IPNames to specify a security mechanism in the SECURITY_OUT column that the remote server supports.

**00D3010F**

**Explanation:** DB2 was unable to authenticate the DRDA end user, due to an error detected by RACF or DCE.

**System Action:** The end user's attempt to connect is rejected. An SQLCODE -30082 is returned to the application.

**User Response:** Notify the system programmer.

**System Programmer Response:** Correct the error detected by DCE or RACF. Both products write messages to the MVS console describing the error.

---

**# 00D30110**

**Explanation:** A DRDA error occurred. The DB2 crypto security component detected an error and could not process the encryption security tokens used to authenticate the end user.

**System Action:** The attempt to connect to DB2 fails, the failure is reported to the SQL application with an SQLCODE of -30082, and the connection is terminated.

**System Programmer Response:** Determine the reason for the failure by verifying the DRDA data stream and by reviewing the server diagnostic work area returned in the DRDA security check reply message.

**Problem Determination:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

---

**00D31010**

**Explanation:** An internal logic error occurred while a DCRM functional service was being invoked.

This abend reason code is issued by the following CSECT: DSNLCTnnn

DSNLCTnnn identifies that a DCRM Conversation manager CSECT detected a logic error. Refer to the dump title for the specific CSECT name.

**System Action:** A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

**System Programmer Response:** Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets from each connected site. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051  56, 57.

00D31011

Explanation: An internal logic error occurred while invoking a VTAM functional service.

This abend reason code is issued by the following CSECT: DSNLVvnn

DSNLVvnn identifies that a DCRM VTAM manager CSECT detected a logic error. Refer to the dump title for the specific CSECT name.

System Action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

User Response: Notify the system programmer.

Operator Response: Collect the SYS1.LOGREC listing and the SVC dump.

System Programmer Response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain any related diagnostic information from each connected site and the SVC dump and SYS1.LOGREC at the site of the DB2 failure. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051  56, 57.

00D31012

Explanation: A VTAM functional service request failed because the state of the conversation was invalid for the request.

This abend reason code is issued by the following CSECTs: DSNLVDDC DSNLVFSM

System Action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

User Response: Notify the system programmer.

Operator Response: Collect the SYS1.LOGREC listing and the SVC dump.

System Programmer Response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain any related diagnostic information from each connected site and the SVC dump and SYS1.LOGREC at the site of the DB2 failure.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051  56, 57.

00D31013

Explanation: A DB2 message was received with an invalid message block header (MBH). The MBH is a header that preceeds all messages exchanged between two DB2 subsystems.

This abend reason code is issued by the following CSECTs: DSNLVASY DSNLVRCA DSNLVROP

System Action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

User Response: Notify the system programmer.

Operator Response: Collect the SYS1.LOGREC listing and the SVC dump.

System Programmer Response: Determine which connected sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain any related diagnostic information from each connected site and the SVC dump and SYS1.LOGREC at the site of the DB2 failure. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051  56, 57.

00D31014

Explanation: One or more invalid parameters were supplied while invoking a VTAM functional service.

This abend reason code is issued by the following CSECTs: DSNLVASY DSNLVDCC DSNLVFSM DSNLVINF DSNLVSDA DSNLVSCA

System Action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

User Response: Notify the system programmer.

Operator Response: Collect the SYS1.LOGREC listing and the SVC dump.

System Programmer Response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain any related diagnostic information from each connected site and the SVC dump and SYS1.LOGREC at the site of the DB2 failure.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051  56, 57.
00D31018

Explanation: A syntax error was detected in a DDM reply received from a remote distributed database remote server.

This abend reason code is issued by the following CSECTs: DSNLCSRR DSNLCMSR

System Action: The attempt to access the remote database resource fails, and the failure is reported to the application.

A DSNL031I message might have been written to the console. Refer to the description of this message for further information.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051, 1, 83.

00D31019

Explanation: A DDM protocol error was detected in a DDM reply received from a remote distributed database remote server.

This abend reason code is issued by the following CSECTs: DSNLCSMR DSNLCSRR

System Action: The attempt to access the distributed resource fails, and the failure is reported to the local DB2.

A DSNL031I message might have been written to the console. Refer to the description of this message in this book for further information.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051, 1, 83.

00D3101A

Explanation: A syntax error was detected in a DDM request received from a remote distributed database local DB2.

This abend reason code is issued by the following CSECT: DSNLCLRTD

System Action: The attempt to access the DB2 server fails, and the failure is reported to the local DB2.

A DSNL032I message may have been written to the console. Refer to the description of this message for further information.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051, 1, 83.

00D3101B

Explanation: A DDM protocol error was detected in a DDM request received from a remote distributed database local DB2.

This abend reason code is issued by the following CSECT: DSNLCLRTD

System Action: The attempt to access the DB2 server fails, and the failure is reported to the local DB2.

A DSNL032I message may have been written to the console. Refer to the description of this message for further information.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051, 1, 83.

00D3101C

Explanation: DB2 has detected an error while processing a connection request from DDCS. A DB2RA connection request was received from DDCS.

This reason code is issued by the following CSECTs: DSNLCLRTD and DSNLIRTR.

System Action: A DDM reply message (SYNTAXRM) is returned to the DRDA client.

Operator Response: Notify the DDCS system administrator.

System Programmer Response: This is probably not a DB2 problem. This error is most likely caused by an incorrect entry in the DCS directory on DDCS. Refer to IBM Distributed Database Connection Services Installation and Configuration Guide for information on configuring your DDCS system.

00D31022

Explanation: The requested VTAM function for allocating a conversation was not performed because the data manager returned an unavailable resource when attempting to read the SYSIBM.LOCATIONS table in the communication database (CDB). The LOCATION cannot be resolved to the remote DB2 subsystem LUNAME.

This abend reason code is issued by the following CSECT: DSNLVCLM

System Action: Notification of the failure is returned to the application. The conversation is not allocated.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: For more information, refer to the explanation of message DSNL700I. Collect the following diagnostic items:

- Definitions of the communication database (CDB) table space, tables, and indexes involved in the error.
- Items 1 and 5 listed in Appendix B, “Problem determination” on page 1051
00D31023
Explanation: A request for a protected SNA conversation was rejected by a DB2 server because the SNA exchange log names (XLN) process has not yet completed with the requesting system.
This abend reason code is issued by the following CSECT: DSNLVPFV
System Action: Message DSNL030I is displayed on the system console with reason code 00D31023. The SNA conversation is rejected with SNA sense code 08640001, indicating the SNA protocol for protected conversations was violated.
User Response: Notify the DB2 system programmer.
System Programmer Response: The requesting system should have sent a valid SNA XLN request before starting a protected conversation. Contact the system programmer for the requesting system to determine why the SNA XLN process was not completed successfully.
Problem Determination: Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1.

00D31024
Explanation: The requested VTAM function for allocating a conversation was not performed because the location name is not defined in the SYSIBM.LOCATIONS table in the communication database (CDB).
This abend reason code is issued by the following CSECTs: DSNLVVAC DSNLVCLM DSNLVPFV
System Action: Notification of the failure is returned to the application. The conversation is not allocated to the specified location.
Operator Response: Notify the system programmer.
System Programmer Response: Add the location to the SYSIBM.LOCATIONS table.
Problem Determination: Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 73, 74.

00D31025
Explanation: The requested VTAM function for allocating a conversation was not performed because a mode name could not be found in the SYSIBM.MODESELECT table in the communication database (CDB) for the requesting thread.
This abend reason code is issued by the following CSECT: DSNLVCLM
System Action: Notification of the failure is returned to the application. The conversation is not allocated.
Operator Response: Notify the system programmer.
System Programmer Response: Add the mode name to be selected in the SYSIBM.MODESELECT table for the authorization ID, PLANNAME, and LUNAME of the service request that failed.

Problem Determination: Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 75, 76.

00D31026
Explanation: The requested VTAM function was not performed because VTAM returned a nonzero return code while attempting to communicate on a conversation.
This abend reason code is issued by the following CSECT: DSNLVRPV
System Action: Notification of the failure is returned to the application. The conversation is abnormally deallocated.
Operator Response: Notify the system programmer.
System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Problem Determination: For more information, refer to the explanation of message DSNL500I or message DSNL502I, depending on the type of conversation that failed.
Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 5.

00D31027
Explanation: The requested VTAM function cannot be performed because VTAM is abending or because the operator has issued a HALT NET command to terminate VTAM.
This abend reason code is issued by the following CSECTs: DSNLVVAC DSNLVCLM DSNLVPFV DSNLVVCM
DSNLVRCA DSNLVREQ DSNLVSQA DSNLVSDA
DSNLVSEA DSNLVPCS DSNLVPFV DSNLVROP
System Action: Notification of DDF termination is reported to the application. No remote communications are allowed. The distributed data facility is terminated.
Operator Response: Notify the system programmer.
System Programmer Response: Notify the system programmer.

00D31029
Explanation: The requested VTAM function to allocate a conversation failed. VTAM returned a nonzero return code while attempting to negotiate limits with a remote location for a mode.
This abend reason code is issued by the following CSECT: DSNLVCNS
System Action: Notification of the failure is returned to the application. All communications to the remote location on the mode fail until the CNOS is successfully negotiated.
Operator Response: Notify the system programmer.
System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Problem Determination: For more information, refer to the explanation of message DSNL501I.
Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 5.
00D3102A
Explanation: A conversation was not allocated because a VTAM LU name contained in the LUNAME column of the SYSIBM.LULIST table was also present in the LUNAME column of the SYSIBM.LUNAMES table. A given VTAM LU name can appear in only one of these two tables.

System Action: The conversation is not allocated.
Operator Response: Notify the system programmer.
System Programmer Response: Make sure each remote VTAM LU is defined in the SYSIBM.LULIST table or the SYSIBM.LUNAMES table, but not both tables.

Problem Determination: Collect the following diagnostic items:
- Print the contents of the SYSIBM.LUNAMES table.
- Print the contents of the SYSIBM.LULIST table.

This abend reason code is issued by the following CSECT: DSNLVCLM

00D3102B
Explanation: A conversation was not allocated because the partner LU attempted to allocate a conversation using a blank mode name. Although DB2 tolerates CNOS requests with a blank mode name, DB2 does not accept conversations with a blank mode name.

System Action: Message DSNL030I is displayed on the system console with reason code 00D3102B. The conversation is not allocated.
Operator Response: Notify the system programmer.
System Programmer Response: Correct the definitions at the partner LU to prevent conversations from being allocated with a blank mode name.

00D31031
Explanation: The local distributed data facility (DDF) is terminating.

This reason code is issued by the following CSECTs:

DSNLCCCN DSNLVACE DSNLVCCS DSNLVDCC
DSNVLVNE DSNLVRC A DSNLVREQ DSNLVSCA
DSNLVSDA DSNLVSEA

System Action: Notification of the failure is returned to the application. DB2 does not allow any new distributed threads while DDF is in termination or is terminated.
User Response: Contact your system programmer to determine why DDF was terminated.
Operator Response: Contact the system to determine the cause of DDF termination.
System Programmer Response: To determine why DDF was terminated and then start DDF.

00D31032
Explanation: The requested VTAM function failed because the distributed data facility (DDF) at the remote location is terminating.

This abend reason code is issued by the following CSECTs:

DSNLCTRC DSNLCTR M DSNLVPL

System Action: DB2 writes a SYS1.LOGREC record. No communication on the conversation is allowed.
Operator Response: Notify the system programmer.
System Programmer Response: To determine the cause of the DDF termination, contact the communication administrator at the location.

00D31033
Explanation: The VTAM function request to allocate a conversation failed because the thread timed-out while waiting for a session.

This abend reason code is issued by the following CSECT: DSNLVALM

System Action: Notification of the failure is returned to the application.
Operator Response: Notify the system programmer.
System Programmer Response: The defined session limit for the mode used by the thread might be too small. The CONVLIMIT specified for the mode might have to be negotiated with the communication administrator at the remote subsystem.

Problem Determination: Refer to message DSNL510I for the limit negotiated by VTAM for the location and mode used by the thread. Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051.

00D31034
Explanation: The MAX REMOTE CONNECTED limit was reached and the conversation was abnormally deallocated. The thread was not allowed to connect to DB2.

This abend reason code is issued by the following CSECT: DSNLVPFV

System Action: The requester is not connected to DB2.
Operator Response: Notify the system programmer.
System Programmer Response: The maximum number of database access threads that can concurrently exist is defined by the installation option MAX REMOTE CONNECTED. When the MAX REMOTE CONNECTED limit is equal to the number of active database access threads plus the number of inactive database access threads, additional threads are not allowed to connect to DB2. Use the DDF global statistics to determine if the limit should be increased.

Problem Determination: Collect the following diagnostic items:
- DDF global statistics to determine the number of requests that failed because of the MAX REMOTE CONNECTED limit.

00D31035
Explanation: The requested VTAM function failed. The database access agent was aborted at the remote location. Notification of the failure is returned to the application. This is an internal error.

This abend reason code is issued by the following CSECT: DSNLCTRC

System Action: DB2 writes a SYS1.LOGREC record and requests an SVC dump at the failed DB2 site.
Operator Response: Notify the system programmer.

System Programmer Response: Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” or page 1051 56, 57.

00D31036

Explanation: The LINKNAME column of the SYSIBM.LOCATIONS table was invalid. Since LINKNAME is a foreign key of the SYSIBM.LUNAMES table, the LINKNAME column must specify one of the values provided in the LUNAME column of the SYSIBM.LUNAMES table. This error should not occur.

This abend reason code is issued by the following CSECT: DSNLVLCLM

System Action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

User Response: Notify the system programmer.

Operator Response: Collect the SYS1.LOGREC, and the SVC dump.

System Programmer Response: Obtain copies of the SYS1.LOGREC and SYSLOG data sets from the DB2 site with the inconsistently defined communications database (CDB).

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” or page 1051 56, 57.

00D31037

Explanation: The remote server was not successfully connected. The SYSIBM.USERNAMES table did not contain an outbound row, the TYPE column specified as an ‘O’ describing the remote authorization identifier to be used for the primary DB2 authorization ID. When the USERNAMES column in SYSIBM.LUNAMES specifies ‘O’ or ‘B’ requiring outbound name translation, the SYSIBM.USERNAMES table must contain entries describing the remote authorization IDs to be used for each DB2 authorization ID communicating with the LU.

This reason code is issued by the following CSECTs: DSNLCCCN DSNLCSRR DSNLTMIG

System Action: A resource unavailable is returned to the application. The request is not sent to the remote site.

Operator Response: Notify the communications database administrator.

System Programmer Response: Make sure the USERNAMES column in SYSIBM.LUNAMES has been specified correctly for the indicated LUNAME. If you intend to use remote authorization IDs that differ from the DB2 authorization IDs, verify that the SYSIBM.USERNAMES table has rows that correctly specify the remote authorization ID to be used for each possible DB2 authorization ID.

Problem Determination: Analyze the SYSIBM.USERNAMES table for an incorrect or missing entry.

00D31038

Explanation: A conversation was not allocated for one of these reasons:

- The requesting LU is part of a DB2 sysplex. When one or more LU names within a DB2 sysplex appear in the SYSIBM.LULIST table at the remote site, all LU names within the sysplex must be identified in the SYSIBM.LULIST table at the remote site.
  - You might have intended to list all the sysplex's LU names in the SYSIBM.LULIST table, but you did not include one or more LU names.
  - You listed a subset of the LU names in SYSIBM.LULIST but none of the LU names you listed are currently available. Please note that it can take up to 3 minutes for LU availability information to be updated following START DDF at the remote site.
- The location name sent to a remote site does not match the location name recorded in the BSDS at that remote site.
- The local SYSIBM.LULIST table is incorrectly defined for the remote location.

A DSNL030I message might have been written to the console.

System Action: A record is written to SYS1.LOGREC and the conversation is not allocated.

Operator Response: Notify the system programmer.

System Programmer Response: The CDB tables and DB2 BSDS parameters must correctly associate the LOCATION names with their corresponding LUNAME names.

The cause of this error is usually one of the following:

- The BSDS at the remote site does not have the correct LOCATION or LUNAME value, which causes the remote DBMS to respond to the wrong LOCATION name when receiving distributed database requests.
- The SYSIBM.LOCATIONS table at the local DB2 system has an incorrect value in the LINKNAME or LOCATION column for the failing LOCATION, which causes the request to be sent to the wrong remote DBMS.
- The SYSIBM.LULIST table at the local DB2 system has an incorrect value in the LUNAME column for the failing LOCATION, which causes the request to be sent to the wrong remote DBMS.
- Not all LU names in the requesting DB2 sysplex are defined in the SYSIBM.LULIST table at the remote site.
- Not all LU names in the requesting DB2 sysplex are defined in the SYSIBM.LULIST table at the server DB2 subsystem. The remote LU is not allowed access to the server subsystem.

In general, when the requester is a member of a sysplex, each member of the requesting sysplex should be defined in SYSIBM.LULIST of the server subsystem. However, there may be cases where an LU of a remote sysplex is not defined in SYSIBM.LULIST of the local subsystem to prevent the remote LU from being a candidate member when accessing the remote sysplex. This is known as "member specific routing". If the remote sysplex LU attempts to access the local subsystem, this reason code
will be returned if the remote LU is not defined in the local SYSIBM.LULIST table and is also not defined in SYSIBM.LUNAMES. Remote requesting sysplex members can be defined in SYSIBM.LULIST, or, when member specific routing requirements to the remote sysplex member are desired, the remote sysplex LU can be defined in SYSIBM.LUNAMES for inbound purposes from the remote sysplex LU that contain the appropriate inbound security characteristics.

- The local DB2 system contains a SYSIBM.LULIST row for a remote system that is not a member of a Data Sharing group. SYSIBM.LULIST rows CANNOT be defined for remote non Data Sharing server systems. Remove the SYSIBM.LULIST row for the remote systems.

Problem Determination:

- Determine the LUNAME and LOCATION name of the DB2 system that attempted to start a VTAM conversation.
- Print the contents of the SYSIBM.LOCATIONS table at that site.
- Print the contents of the SYSIBM.LULIST table at both the local site and the remote site.
- Determine the LUNAME and LOCATION name of the remote DBMS involved in the failure from the BSDS at the remote site.
- Issue the -DISPLAY LOCATION command to determine which LUNAMES and LOCATIONs were active at the time of failure.

This abend reason code is issued by the following CSECTs:

- DSNLCSIM
- DSNLVCLM
- DSNLVFFS

**00D31039**

**Explanation:** The requested VTAM function to allocate a conversation was not performed because the SYSIBM.USERNAMES table at the requesting site did not contain a row describing the remote authorization ID to be used for this DB2 authorization ID. When the USERNAMES column in SYSIBM.LUNAMES specifies 'O' or 'B', outbound name translation is in effect. The SYSIBM.USERNAMES table must contain entries describing the remote authorization ID to be used for each DB2 authorization ID communicating with that LUNAME.

This abend reason code is issued by the following CSECT: DSNLVCLM

**System Action:** A record is written to SYS1.LOGREC, and the conversation is not allocated.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Make sure the USERNAMES column in SYSIBM.LUNAMES has been specified correctly for the indicated LUNAME. If you intend to use remote authorization IDs that differ from the DB2 authorization ID, verify that the SYSIBM.USERNAMES table has rows that correctly specify the remote authorization ID to be used for each possible DB2 authorization ID. These rows must specify 'O' in the TYPE column of the SYSIBM.USERNAMES table.

**Problem Determination:** Determine the LUNAME and authorization ID for the failing VTAM conversation. Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 56, 59.

**00D3103A**

**Explanation:** Database access agent allocation failed because the RACROUTE REQUEST=EXTRACT macro failed to locate a user profile for the DB2 primary authorization ID obtained from the SYSIBM.USERNAMES table. When the ENCRYPTPSWDS column in SYSIBM.LUNAMES specifies 'Y', the requesting DB2 system must be able to extract the encrypted password (via RACROUTE REQUEST=EXTRACT) and send this encrypted password to the responding DB2 system for validation.

This reason code is issued by the following CSECT: DSNLVINF

**System Action:** The reason code is returned to the application.

**Operator Response:** Notify the communications database administrator.

**System Programmer Response:** Make sure the new authorization ID column in SYSIBM.USERNAMES has been specified correctly for the indicated LUNAME. If you intend to use encrypted passwords, the new authorization ID must be defined to your MVS security subsystem.

**Problem Determination:**

- Analyze the SYSIBM.USERNAMES table for an incorrect or missing entry.
- Verify that the names given in the NEWAUTHID column are defined to your MVS security subsystem properly.

**00D3103B**

**Explanation:** An attempt to allocate an LU.62 conversation failed because the conversation limits for the desired partner LU and VTAM MODE have been reached.

This abend reason code is issued by the following CSECT: DSNLVVALM

**System Action:** This reason code is generated internally when an attempt is made to allocate an LU.62 conversation and conversation limits have been reached for the desired partner LU and VTAM MODE. In this situation, the requesting DB2 system will attempt to reuse one of the existing LU.62 conversations that have already been allocated to the agent in question.

The allocate process will be retried using the existing conversation.

**System Programmer Response:** If you increase the LU.62 conversation limits for the indicated partner LU and VTAM MODE, it will not be necessary for DB2 to reclaim conversations in order to allocate additional LU.62 conversations. The reclaiming process will reduce system throughput, since the reclaimed conversation will have to service multiple SQL statements.

**00D3103C**

**Explanation:** An attempt to allocate an LU.62 conversation failed because the specified partner LU cannot support the LU.62 SECURITY=SAME capability (that is, the LU.62 Already-Verified security function).

This abend reason code is issued by the following CSECT: DSNLVAAAC

**System Action:** The attempt to allocate an LU.62 conversa-
tion fails, and the error is reported to the DB2 application that requested access to the distributed resource.

**User Response:** Notify your DB2 system programmer.

**System Programmer Response:** DB2 will attempt to use SECURITY=SAME when connecting to remote database systems whose USERSECURITY column in the SYSIBM.LUNAMES table contains a value other than 'C'. In order to support the LU6.2 SECURITY=SAME function, the target DBMS must declare support for the SECURITY=SAME function.

If the target DBMS is DB2, support for the SECURITY=SAME function is declared by specifying the following:

1. The DB2 VTAM APPL definition must specify SECACPT=ALREADYV at the remote DB2 subsystem.
2. The value in the USERSECURITY column of the SYSIBM.LUNAMES table at the remote DB2 subsystem must specify a value other than 'C' in the row associated with the requesting DB2 subsystem.

**Problem Determination:** Collect the following diagnostic items:

- The VTAM APPL definition for the remote DB2 system.
- The contents of the SYSIBM.LUNAMES table.

---

**00D3103D**

**Explanation:** An attempt to allocate a VTAM LU6.2 conversation with a remote site failed because the request did not contain the proper security information.

This abend reason code is issued by the following CSECT: DSNLVRPL

**System Action:** The attempt to access the remote database resource failed and the failure is reported to the application.

**User Response:** Notify the communications database administrator.

**System Programmer Response:** This error is usually caused by transmitting an invalid authorization ID or password in a request to the remote site. However, this is not always the case, so it is important to review the diagnostic information at the remote site to determine the cause of the failure.

- If the remote site is a DB2 subsystem, refer to the DSNL303I message at the remote DB2 system. Additionally, an ALERT will be recorded in NetView (if the NetView product is available) to describe the security failure.

If the remote site is not a DB2 subsystem, obtain any diagnostic information about the security failure at the remote site.

If you suspect the authorization ID or password is not correct, the DB2 CDB on the local DB2 system should be examined to validate the following items:

- If the remote site requires both an authorization ID and a password on LU6.ALLOCATE requests (i.e., the remote site does not accept already-verified ALLOCATE requests), the USERNAMES column of the SYSIBM.LUNAMES table at the local DB2 system must specify either 'O' or 'B'.
- If the USERNAMES column of the SYSIBM.LUNAMES table at the local DB2 system specifies 'O' or 'B', the SYSIBM.USERNAMES table will be used to determine the authorization ID and password sent on the LU6.ALLOCATE request.

If you intend to translate the authorization IDs, ensure that the NEWAUTHID column of the SYSIBM.USERNAMES table contains the correct authorization ID to be used at the remote site.

- If the remote site is a DB2 system, the ENCRYPTPSWDS value in the SYSIBM.LUNAMES table must exactly match the ENCRYPTPSWDS column of the SYSIBM.LUNAMES table at the remote site.

- If the remote site is not a DB2 system, the ENCRYPTPSWDS value in the SYSIBM.LUNAMES table must be set to 'N'.

- If you are transmitting passwords to the remote site, the password transmitted by the local DB2 system must exactly match the value expected by the remote site.

  1. For encrypted passwords, the password sent to the remote DB2 subsystem is obtained by extracting the RACF password of the user identified by the NEWAUTHID column in the SYSIBM.USERNAMES table. This user’s RACF password must exactly match the password at the remote site.

  2. If password encryption is not used, the password will be taken from the PASSWORD column of the SYSIBM.USERNAMES table. This value must exactly match the password at the remote site.

**Problem Determination:** Collect the following diagnostic items listed in [Appendix B, "Problem determination" on page 1051](#) 58, 59, 1.

---

**00D3103E**

**Explanation:** The requested VTAM function to allocate a conversation was not performed because the VTAM MODE specified a conversation limit of zero. The conversation limits must be set to a value greater than zero before a conversation can be allocated.

This abend reason code is issued by the following CSECT: DSNLVALM

**System Action:** The conversation is not allocated.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you have placed entries in the SYSIBM.LUMODES table, make sure CONVLIMIT column has a nonzero value. If you are allowing the session limits to be chosen by VTAM, make sure the DSESLLIM values on the VTAM APPL and mode entries are nonzero.

**Problem Determination:** Collect the following diagnostic items:

- Determine the LUNAME and MODE name of the DB2 system that attempted to start a VTAM conversation.
- Print the contents of the SYSIBM.LUMODES table.
- Determine the session limits defined on the VTAM APPL statement and the VTAM MODE entry.
00D3103F

Explanation: An attempt to allocate a VTAM LU6.2 conversation with a remote site failed because the server at the remote site does not use two-phase commit.

This abend reason code is issued by the following CSECTs: DSNLVPRP

System Action: DB2 starts a new conversation to the remote site that does not use two-phase commit. DB2 does not attempt to use two-phase commit with this remote site until DDF is restarted.

System Programmer Response: This reason code is produced when the LU at the remote site supports two-phase commit, but the TPN at the remote LU does not support two-phase commit. This is a normal situation, so no system programmer action is required.

00D31040

Explanation: The requested VTAM function failed before the database access agent has failed. This is an internal error.

This abend reason code is issued by the following CSECTs: DSNLCTRC, DSNLCRTR, DSNLCRTD

System Action: DB2 writes a SYS1.LOGREC record and requests an SVC dump at the failed DB2 site.

Operator Response: Notify the system programmer.

System Programmer Response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 failure. Obtain any related diagnostic information from each connected site and the SVC dump and SYS1.LOGREC at the site of the DB2 failure.

Problem Determination: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

00D31041

Explanation: The requested VTAM function to allocate a conversation was not performed because the SYSIBM.USERNAMES table at the responding site did not contain a row whose authorization ID column matches the DB2 authorization ID received from the requesting DB2 system. When the USERNAMES column in SYSIBM.LUNAMES specifies ‘I’ or ‘B’, inbound name translation is in effect. The SYSIBM.USERNAMES table must contain entries describing the local DB2 authorization ID to be used for each possible remote authorization ID. These rows must specify ‘I’ in the TYPE column of the SYSIBM.USERNAMES table.

Problem Determination: Determine the LUNAME and authorization ID for the failing VTAM conversation. Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

00D31042

Explanation: The requested VTAM function failed. The connection to the remote location was interrupted. This is an internal error.

This abend reason code is issued by the following CSECT: DSNLCSIM

System Action: A record is written to SYS1.LOGREC and an SVC dump is requested at the failed DB2 site.

Operator Response: Notify the system programmer.

System Programmer Response: Obtain copies of the SYS1.LOGREC and SYSLOG data sets from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

00D31043

Explanation: The requested VTAM function failed. The connection from the remote location was interrupted. This is an internal error.

This abend reason code is issued by the following CSECT: DSNLCSIM

System Action: A record is written to SYS1.LOGREC and an SVC dump is requested at the failed DB2 site.

Operator Response: Notify the system programmer.

System Programmer Response: Obtain copies of the SYS1.LOGREC and SYSLOG data sets from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

00D31044

Explanation: A remote subsystem has attempted to allocate a VTAM LU6.2 conversation, but the request was rejected because the request did not contain the proper security information. The FMH5 received from the remote subsystem did not contain any security subfields. This represents SECURITY=None in the LU6.2 architecture, which is not supported by DB2.

This abend reason code is issued by the following CSECT: DSNLVPFF5
System Action: The attempt to access the remote database resource fails and the failure is reported to the application.

A DSNL030I message may have been written to the console.

User Response: Notify the communications database administrator.

Operator Response: Notify the system programmer.

System Programmer Response: Verify that the remote subsystem is configured to send valid security subfields.

If the remote subsystem is DB2, make sure the VTAM APPL definition does not specify SECACPT=NONE, which is the default for the VTAM APPL definition. SECACPT=NONE will cause VTAM to remove the security subfields from the FMH5.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051.

00D31045

Explanation: A remote subsystem has attempted to allocate a VTAM LU6.2 conversation, but the request was rejected because the request did not contain the proper security information. The FMH5 received from the remote subsystem did not contain the security subfield that supplies the USERID, or the USERID was not 1 to 8 bytes in length.

This abend reason code is issued by the following CSECT: DSNLVPF5

System Action: The attempt to access the remote database resource fails and the failure is reported to the application.

A DSNL032I message may have been written to the console. Refer to the description of this message for further information.

User Response: Notify the communications database administrator.

Operator Response: Notify the system programmer.

System Programmer Response: Verify that the remote subsystem is configured to send valid security subfields.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051.

00D31046

Explanation: A remote subsystem has attempted to allocate a VTAM LU6.2 conversation, but the request was rejected because the request did not contain the proper security information. The FMH5 received from the remote subsystem indicated SECURITY=SAME (also known as Already-Verified) and the subsystem in question was not authorized to send requests with SECURITY=SAME.

This abend reason code is issued by the following CSECT: DSNLVPF5

System Action: The attempt to access the remote database resource fails and the failure is reported to the application.

A DSNL030I message may have been written to the console.

User Response: Notify the communications database administrator.

Operator Response: Notify the system programmer.

System Programmer Response: Verify that the remote subsystem is configured to send valid security subfields.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 58, 59, 83.

00D31048

Explanation: The requested VTAM function for allocating a conversation at the DB2 server was not performed because the requester's LUNAME is not defined in the SYSIBM.LUNAMES table of the communication database (CDB) at the server.

This abend reason code is issued by the following CSECT: DSNLVPF5

System Action: Notification of the failure is returned to the application. The conversation is not allocated to the specified location.

Operator Response: Notify the system programmer.

System Programmer Response: Add the requester's LUNAME to the SYSIBM.LUNAMES table at the server. If the remote LU is DB2, the requester's LUNAME is the label name, as opposed to the ACBNAME keyword, on the DB2 VTAM APPL statement for the requester site. A server's SYSIBM.LUNAMES table should contain and entry for the requester's LUNAME.

Users should also be aware that in the absence of a SYSIBM.LUNAMES row that specifically identifies the remote LU, a "default" SYSIBM.LUNAMES row (blank LUNAME) may be utilized, if defined, if the inbound connection is via DRDA protocols. This "default" row may not reflect the desired inbound security characteristics in which case a SYSIBM.LUNAMES row can be defined that explicitly identifies the remote LU.

A DSNL030I message may have been written to the console at the server.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 58.

00D31049

Explanation: A request using application-directed access starting at site 'A' referenced an object at site 'B' that is stored at site 'A'.

This abend reason code is issued by the following CSECT: DSNLCCCN

System Action: The application statement was not processed.

User Response: Recode the application to remove the alias reference at the remote server that resolves to an object stored at the local DB2. Objects stored at the local site must be referenced using a local name.

Problem Determination: If necessary, consult with the database administrators at the local site and the remote server location. Inspect the remote SYSIBM.SYSTABLES catalog table to determine the object at this location being referenced in a circular manner.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1.

00D3104A

Explanation: A remote server issued an SNA BACKOUT, which was not sent as a reply to an SNA PREPARE or REQUEST_COMMIT. This indicates the server backed out the current unit of work without waiting for the SQL application to either commit or roll back.

This abend reason code is issued by the following CSECT: DSNLVRFPL

System Action: The attempt to access the remote database resource fails and the failure is reported to the application. DB2 terminates the SNA conversation to the remote server and forces the application to roll back.

User Response: Notify the DB2 systems programmer.

System Programmer Response: DB2 never issues an unsolicited SNA BACKOUT. Non-DB2 servers can send an SNA BACKOUT indication when resources required to complete the unit of work are not available. For example, a deadlock might cause the non-DB2 server to send an SNA BACKOUT. Contact the system programmer for the remote system to determine why the unit of work had to be aborted.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1.

00D3104B

Explanation: An SNA conversation was rejected by a DB2 server because the SNA FMH5 specified SNA persistent verification. DB2 does not support the SNA persistent verification option.

This abend reason code is issued by the following CSECT: DSNLVPF5

System Action: Message DSNL030I is displayed on the system console with reason code 00D3104B. The SNA conversation is rejected with SNA sense code X’080F6051’, indicating the SNA security parameters in the FMH5 were not acceptable.

User Response: Notify the DB2 system programmer.

System Programmer Response: The SECACPT= keyword on the VTAM APPL statement tells VTAM whether DB2 supports persistent verification. Because DB2 does not support persistent verification, the SECACPT=-PERSISTV and SECACPT=AVPV options cannot be used on DB2's VTAM APPL statement.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1.

00D3104C

Explanation: The SNA Exchange Log Names (XLN) process failed because of a log name mismatch between DB2 and a remote LU in the network.

This abend reason code is issued by the following CSECT: DSNLCCXL

System Action: The attempt to allocate an SNA two-phase commit conversation fails with reason code 00D3104C. Message DSNL410 is displayed on the system console to describe the error.

User Response: Contact the DB2 systems programmer.
System Programmer Response: The log name recorded in the DB2 log does not match the log name currently in use at the remote LU. There are indoubt units of work that need to be resolved at this DB2 system. The log name required to resolve the indoubt units of work is displayed in the DSNL410 message.

If a non-DB2 partner was started with the wrong log, it might be possible to restart the non-DB2 partner with the desired log name. This should cause the indoubt units of work to be resolved automatically.

If the partner cannot be restarted with the desired log name, the -RECOVER INDOUBT command can be used to resolve the indoubt units of work. Once the indoubt units of work are resolved, DB2 will accept an SNA XLN with a new partner log name.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” or page 1051.

00D3104D
Explanation: The local DB2 system does not support connectivity to the DB2 release currently running at the remote DB2 site.

This abend reason code is issued by the following CSECT: DSNLCSIM

System Action: The attempt to allocate an SNA conversation is rejected with reason code 00D3104D.

User Response: Contact the DB2 systems programmer.

System Programmer Response: DB2 distributed database connections can only be established between compatible DB2 releases. For example, DB2 Version 3 can connect to DB2 2.3, but not to DB2 2.2.

In order to establish connectivity, the down-level DB2 system must be migrated to a supported release of DB2.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” or page 1051.

00D3104E
Explanation: An SNA Exchange Log Names (XLN) protocol violation was detected when attempting to establish a connection to a remote site.

This abend reason code is issued by the following CSECT: DSNLCXLI

System Action: The attempt to allocate an SNA conversation is rejected with reason code 00D3104E. Message DSNL421E is written to the system console and IFCID 0213 is produced to describe the protocol violation.

User Response: Contact the DB2 systems programmer.

System Programmer Response: Contact the system programmer for the remote site. The invalid XLN message is recorded in the IFCID 0213 trace record. The system logic error that causes the invalid XLN message must be corrected at the remote site.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” or page 1051.

00D3104F
Explanation: A connection to a remote location was lost during a previous communication operation.

This abend reason code is issued by the following CSECTs: DSNLBCS, DSNLCSRM, DSNLC8SR, DSNLCMSR

System Action: If the communication failure occurred during a commit or abort operation, the SQL application might not be aware that a failure occurred. Messages associated with the failure were written to the system console at the time of failure. Additionally, alerts were reported to NetView at the time of failure.

User Response: Reestablish the connection to the remote site and reissue the SQL statement.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” or page 1051.

00D31050
Explanation: DB2 expected to receive security information for the remote client but a valid DRDA SECCHK command was not received for a connection request from a DRDA application requester (AR). The DRDA SECCHK command is only valid with a DRDA security manager level greater than or equal to 5.

This can be the case if one of the following occurs:

• The DRDA AR requested a DRDA security manager less than level 5 for an SNA connection where the APPL command for DB2 was specified with the SECACPT=NONE option.
• The DRDA SECCHK command did not contain the required security information.
• The DRDA AR requested a DRDA security manager less than level 5 for a TCP/IP connection.

This abend reason code is issued by the following CSECTs: DSNLTEXC, DSNLTEXC.

System Action: The attempt to access the local database resource fails, the failure is reported to the SQL application, and the conversation is terminated.

System Programmer Response: For SNA connections, if SECACPT=NONE and the DRDA AR does not support DRDA security manager level 5, contact the DB2 security administrator to change the SECACPT option to ALREADYV or CONV to allow for security information in the VTAM FMH-5 in the form of userid or userid/password fields. If SECACPT=NONE is not changed, then DB2 cannot accept connection requests from this remote client.

For SNA connections, if SECACPT=ALREADYV or CONV, then even though userid or userid/password fields in the FMH-5 are received and validated, DB2 must evaluate a DRDA SECCHK command if it is sent. If the DRDA AR requests this level of security but does not provide the correct information in the form of a SECCHK command, this is a DRDA protocol error committed by the DRDA AR implementation at the remote client.

For TCP/IP connections, this is a DRDA protocol error committed by the DRDA AR implementation at the remote client.

Problem Determination: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem. Collect the fol-
Problem Determination: Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 2, 5.

00D31051 >

Explanation: DB2 was passed a DCE security token during connection request processing, but could not derive an authenticated local userid from the security token.

System Programmer Response: Notify the system programmer.

System Programmer Response: Use the information in the SYSDМ.IPNAMES or SYSDМ.IPNAMES that matches the LINKNAME specified in SYSIBM.LOCATIONS.

Problem Determination: Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1.

00D31056

Explanation: The PORT column of the SYSDМ.IPNAMES table could not be converted to a TCP/IP port number by the getservbyname TCP/IP socket call.

System Programmer Response: Use the information in the DSNL514, DSNL517, or DSNL518 message to resolve the error.

Problem Determination: Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1.

00D31057

Explanation: DB2 was able to find the row in SYSDМ.LOCATIONS for the LOCATION specified in the SQL request. However, the LINKNAME column value specified in LOCATIONS did not match any row in SYSDМ.LUNAMES or SYSDМ.IPNAMES.

System Programmer Response: Insert a row in SYSDМ.LUNAMES or SYSDМ.IPNAMES that matches the LINKNAME specified in SYSDМ.LOCATIONS.

00D31058

Explanation: The IPADDR column of the SYSDМ.IPNAMES table could not be converted to an IP address by the gethostbyname TCP/IP socket call.

System Programmer Response: Use the information in the DSNL513, DSNL517, or DSNL518 message to resolve the error.

Problem Determination: Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1.
Problem Determination: Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051.

00D31059

Explanation: An attempt to allocate a conversation to the remote site failed because DB2 was unable to obtain a RACF PassTicket. The user specified an "R" in the SECURITY_OUT column of the SYSIBM.IPNAMES and/or SYSIBM.LUNAMES communications database (CDB) tables for the partner site. As a result, DB2 invokes RACF to extract a PassTicket for the partner site. However, RACF could not provide a PassTicket, and the attempt failed.

System Action: The attempt to access the remote database resource failed, and the failure is reported to the application.

User Response: Notify the system programmer.

System Programmer Response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain any related diagnostic information from each connected site and the SVC dump and SYST.LOGREC at the site of the DB2 failure.

Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051.

00D31102

Explanation: A data communications functional service encountered an inconsistency in the requesting thread control block structure. This is an internal error.

This abend reason code is issued by the following CSECTs:

DSNLCCCN DSNLCSRM DSNLCTCN

System Action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator Response: Notify the system programmer.

System Programmer Response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYST.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051.

00D31103

Explanation: A data communications functional service received an invalid logical-unit-of-work ID (LUWID) or no LUWID. This is an internal error.

This abend reason code is issued by the following CSECTs:

DSNLCCCN, DSNLCCDR

System Action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator Response: Notify the system programmer.

System Programmer Response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain any related diagnostic information from each connected site and the SVC dump and SYST.LOGREC as the site of the DB2 failure.

Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051.

00D31101

Explanation: A data communications functional service was invoked with the cursor table marked invalid. This is an internal error.

This abend reason code is issued by the following CSECTs:

DSNLCCCN DSNLCCDR DSNLCSRM

System Action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator Response: Notify the system programmer.

System Programmer Response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain any related diagnostic information from each connected site and the SVC dump and SYST.LOGREC at the site of the DB2 failure.

Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051.
00D31104

Explanation: A data communications functional service cannot find a distributed processing block for the primary thread. This is an internal error.

This abend reason code is issued by the following CSECTs:

DSNLCSRM DSNLCTCN DSNLCBCS DSNLCCNR
DSNLCPCR DSNLCTDR

System Action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator Response: Notify the system programmer.

System Programmer Response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain any related diagnostic information from each connected site and the SVC dump and SYS1.LOGREC at the site of the DB2 failure.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

00D31105

Explanation: A data communications functional service detected an invalid or incorrect buffer size on a send message operation. This is an internal error.

This abend reason code is issued by the following CSECT: DSNLCSRM

System Action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator Response: Notify the system programmer.

System Programmer Response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain any related diagnostic information from each connected site and the SVC dump and SYS1.LOGREC at the site of the DB2 failure.

Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

00D31106

Explanation: A data communications functional service detected an invalid message sequence. One or more rows of data might have been lost. This is an internal error.

This abend reason code is issued by the following CSECT: DSNLCSRM

System Action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator Response: Notify the system programmer.

System Programmer Response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain any related diagnostic information from each connected site and the SVC dump and SYS1.LOGREC at the site of the DB2 failure.

Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

00D31107

Explanation: A data communications functional service was invoked incorrectly (protocol violation) to wait for a message. This is an internal error.

This abend reason code is issued by the following CSECTs: DSNLCSRM, DSNLCCNR

System Action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator Response: Notify the system programmer.

System Programmer Response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain any related diagnostic information from each connected site and the SVC dump and SYS1.LOGREC at the site of the DB2 failure.

Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

00D31108

Explanation: A data communications functional service was invoked incorrectly (protocol violation) to receive a message. This is an internal error.

This abend reason code is issued by the following CSECTs: DSNLCSRM, DSNLCCNR

System Action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator Response: Notify the system programmer.

System Programmer Response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain any related diagnostic information from each connected site and the SVC dump and SYS1.LOGREC at the site of the DB2 failure.

Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.
00D31109

Explanation: A data communications functional service was invoked incorrectly (protocol violation) to send a message. This is an internal error.

This abend reason code is issued by the following CSECTs: DSNLCRTR, DSNLCRTD

System Action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator Response: Notify the system programmer.

System Programmer Response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain any related diagnostic information from each connected site and the SVC dump and SYS1.LOGREC at the site of the DB2 failure.

Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 56, 57.

00D31110

Explanation: Instrumentation facility component (IFC) passed a nonzero return code to the data communications resource manager. This is an internal error.

This abend reason code is issued by the following CSECTs: DSNLCRTR, DSNLCRTD

System Action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator Response: Notify the system programmer.

System Programmer Response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain any related diagnostic information from each connected site and the SVC dump and SYS1.LOGREC at the site of the DB2 failure.

Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 56, 57.

00D31111

Explanation: The instrumentation facility component (IFC) passed a nonzero return code to the data communications resource manager. This is an internal error.

This abend reason code is issued by the following CSECTs: DSNLCRTR, DSNLCRTD

System Action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator Response: Notify the system programmer.

System Programmer Response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain any related diagnostic information from each connected site and the SVC dump and SYS1.LOGREC at the site of the DB2 failure.

Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 56, 57.
**00D31112**

**Explanation:** The data communications resource manager cannot find the LUWID for the remote thread in the database thread control blocks. This is an internal error.

This abend reason code is issued by the following CSECTs: DSNLCRTR, DSNLCRTD

**System Action:** A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

Refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051, 56, 57.

---

**00D31113**

**Explanation:** The data communications resource manager received an invalid set of control block pointers. This is an internal error.

This abend reason code is issued by the following CSECT: DSNLCRTR

**System Action:** A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

Refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051, 56, 57.

---

**00D31114**

**Explanation:** A data communications resource manager (DCCM) block for a deallocated conversation which belongs to a database access thread cannot be found. This is an internal error.

This abend reason code is issued by the following CSECT: DSNLCRTR

**System Action:** A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

Refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051, 56, 57.
**00D31117**

**Explanation:** The data communications resource manager received a request with an invalid response type. This is an internal error.

This reason code is issued by the following CSECTs: DSNLCRTR

**System Action:** A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

Refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, “Problem determination” or page 1051.  

---

**00D31118**

**Explanation:** A message-processing routine returned to the data communications resource manager without the requested response. This is an internal error.

This reason code is issued by the following CSECT: DSNLCRTR

**System Action:** A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

Refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, “Problem determination” or page 1051.

---

**00D31119**

**Explanation:** The data communications resource manager processed a request with an unassigned or disconnected message class. This is an internal error.

This reason code is issued by the following CSECT: DSNLCRTR

**System Action:** A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

Refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

---

**00D3111A**

**Explanation:** The data communications resource manager received an unexpected communications error when processing a request. This can occur for any of the following reasons:

- A VTAM session failure caused the premature termination of a DB2 conversation.
- A VTAM VARY NET, INACTIVE or HALT NET command was issued which interrupted a DB2 conversation.
- A DB2 internal logic error occurred.

This reason code is issued by the following CSECTs: DSNLCRTR, DSNLCSIM, DSNLCSDN

**System Action:** A record is written to SYS1.LOGREC and an SVC dump may be requested at the site of the DB2 abend.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If the abend appears to have been caused by a DB2 logic error, determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site as well as any related dumps from each connected site.

If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, “Problem determination” or page 1051.

---

**00D3111B**

**Explanation:** The data communications resource manager cannot find the remote location for the requesting thread in the control blocks. This is an internal error.

This reason code is issued by the following CSECT: DSNLCSIM

**System Action:** A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

Refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.
00D3111C

Problem Determination: Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 56, 57.

00D3111C

Explanation: An internal logic error occurred while invoking a TCP/IP functional service.

This abend reason code is issued by the following CSECT: DSNLInnn

DSNLInnn identifies that a DCRM TCP/IP manager CSECT detected a logic error. Refer to the dump title for the specific CSECT name.

System Action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

User Response: Notify the system programmer.

Operator Response: Collect the SYS1.LOGREC listing and the SVC dump.

System Programmer Response: Determine which sites the abending agent was connected to by examining the DSNLO27 and DSNLO28 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 56, 57.

00D3111F

Explanation: The maximum amount of buffered query data has been exceeded. Rather than return one block of query data, the DRDA server system elected to return multiple extra blocks. Instead of fetching all rows in all the extra blocks, the server is forcing an application to fetch each extra block as it is returned and may buffer only one block in trans. When an application executes an SQL statement not related to the query or executed a commit while a held cursor was still open, DB2 buffers the extra in-transit blocks, however DB2 was not able to buffer the entire set of extra blocks and thus truncated the result set. The application then rescheduled fetching and attempted to fetch data beyond the point of truncation.

System Action: The SQL statement fails.

User Response: Notify the system programmer.

Operator Response: Notify the system programmer.

System Programmer Response: Determine which sites the abending agent was connected to by examining the DSNLO27 and DSNLO28 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 56, 57.

00D34401

Explanation: The relational data system (RDS) passed an invalid function code to the distributed RDS (DRDS). This is an internal error.

This abend reason code is issued by the following CSECT: DSNXLXRD

System Action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator Response: Notify the system programmer.

System Programmer Response: Determine which sites the abending agent was connected to by examining the DSNLO27 and DSNLO28 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 56, 57.

00D34404

Explanation: The relational data system (RDS) passed the distributed RDS (DRDS) an invalid distributed interface block (DIB). This is an internal RDS error.

This abend reason code is issued by the following CSECT: DSNXLXRD

System Action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator Response: Notify the system programmer.

System Programmer Response: Determine which sites the abending agent was connected to by examining the DSNLO27 and DSNLO28 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related
dumps from each connected site. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

---

### 00D34405

**Explanation:** The data communications resource manager (DCRM) passed an invalid LMPP message number to the distributed relational data system (DRDS). This is either an internal DCRM error or an internal DRDS error.

This abend reason code is issued by the following CSECT: DSNLXRTR

**System Action:** A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

---

### 00D34406

**Explanation:** The distributed relational data system (DRDS) detected a message of invalid length from the data communications resource manager (DCRM). The message is longer than the buffer size. This is either an internal DRDS error or an internal DCRM error.

This abend reason code is issued by the following CSECTs: DSNLXOPF, DSNLXSQD

**System Action:** A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

---

### 00D34407

**Explanation:** The distributed relational data system (DRDS) received an invalid return code from the data communications resource manager (DCRM) on a SEND request. This is either a DCRM internal error or a DRDS internal error.

This abend reason code is issued by the following CSECTs: DSNLXQEX, DSNLXQFH, DSNLXQOP, DSNLXQPR

**System Action:** A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

---

### 00D34408

**Explanation:** The distributed relational data system (DRDS) received an invalid LMPP from the data communications resource manager (DCRM). This is either a DCRM internal error or a DRDS internal error.

This abend reason code is issued by the following CSECTs: DSNLXQPF, DSNLXPCL, DSNLXQPR, DSNLXQXI, DSNLXRTR

**System Action:** A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

---

### 00D34409

**Explanation:** The distributed relational data system (DRDS) detected an internal inconsistency. An invalid state transition occurred. This is a DRDS internal error.

This abend reason code is issued by the following CSECTs: DSNLXQPF, DSNLXQFH, DSNLXRTR

**System Action:** A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

**Operator Response:** Notify the system programmer.
System Programmer Response: Determine which sites the
abending agent was connected to by examining the DSNL027
and DSNL028 SYSLOG console messages at the site of the
DB2 abend. Obtain copies of the SYS1.LOGREC and
SYSLOG data sets or similar data from each connected site,
the SVC dump at the site of the DB2 failure, and any related
crashes from each connected site. Refer to Section 3 of DB2
Diagnosis Guide and Reference for information on identifying
and reporting the problem.

Problem Determination: Collect the following diagnostic
items listed in Appendix B, “Problem determination” on
page 1051 56, 57.

00D3440B

Explanation: The distributed relational data system (DRDS)
detected an inconsistency. This is an internal error.

This abend reason code is issued by the following CSECTs:

DSNLXCNMT DSNLXCNV DSNLXQOS DSNLXDSA
DSNLXGET DSNLXIVB DSNLXPF DSNLXQGS
DSNLXPEX DSNLXPFR DSNLXRPS DSNLXPXI
DSNLXQAL DSNLXQCL DSNLXQEX DSNLXQF
DSNLXQOF DSNLXQOR DSNLXQRO DSNLXROR
DSNLXQUR DSNLXQXI DSNLXRAP DSNLXRAX
DSNLXRBF DSNLXRCL DSNLXRCM DSNLXRCS
DSNLXRCE DSNLXRCS DSNLXRDS DSNLXRDT
DSNLXRFT DSNLXRFP DSNLXRSL DSNLXRSG
DSNLXRSS DSNLXRTR DSNLXRUD DSNLXRSS

System Action: DB2 writes a SYS1.LOGREC record and
requests an SVC dump at the failed DB2 site.

Operator Response: Notify the system programmer.

System Programmer Response: Obtain copies of the
SYS1.LOGREC and SYSLOG data sets or similar data from
each connected site, the SVC dump at the site of the DB2
failure, and any related crashes from each connected site. Refer
to Section 3 of DB2 Diagnosis Guide and Reference for
information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic
items listed in Appendix B, “Problem determination” on
page 1051 56, 57.

00D3440C

Explanation: The distributed relational data system (DRDS)
requesting site control block must exist at this time but does
not. This is an internal DRDS error.

This abend reason code is issued by the following CSECT:

DXTNLRDS

System Action: A record is written to SYS1.LOGREC and an
SVC dump is requested at the site of the DB2 abend.

Operator Response: Notify the system programmer.

System Programmer Response: Determine which sites the
abending agent was connected to by examining the DSNL027
and DSNL028 SYSLOG console messages at the site of the
DB2 abend. Obtain copies of the SYS1.LOGREC and
SYSLOG data sets or similar data from each connected site,
the SVC dump at the site of the DB2 failure, and any related
crashes from each connected site. Refer to Section 3 of DB2
Diagnosis Guide and Reference for information on identifying
and reporting the problem.

Problem Determination: Collect the following diagnostic
items listed in Appendix B, “Problem determination” on
page 1051 56, 57.

00D3440D

Explanation: The distributed statistics and accounting control
block does not exist. This is an internal distributed data facility
(DDF) error.

This abend reason code is issued by the following CSECT:

DSNLXDSA

System Action: A record is written to SYS1.LOGREC and an
SVC dump is requested at the site of the DB2 abend.

Operator Response: Notify the system programmer.

System Programmer Response: Determine which sites the
abending agent was connected to by examining the DSNL027
and DSNL028 SYSLOG console messages at the site of the
DB2 abend. Obtain copies of the SYS1.LOGREC and
SYSLOG data sets or similar data from each connected site,
the SVC dump at the site of the DB2 failure, and any related
crashes from each connected site. Refer to Section 3 of DB2
Diagnosis Guide and Reference for information on identifying
and reporting the problem.

Problem Determination: Collect the following diagnostic
items listed in Appendix B, “Problem determination” on
page 1051 56, 57.

00D3440E

Explanation: A distributed request was received, but the
distributed data facility (DDF) is inactive.

This reason code is issued by the following CSECTs:

DSNLXRDS, DSNLXRUD

System Action: The request is not processed.

User Response: Notify the system operator.

Operator Response: Ensure that the DDF has been started.

00D3440F

Explanation: The distributed relational data system (DRDS)
detected a message of invalid length from the data communica-
tions resource manager (DCRM). The message is smaller
than the buffer size, but the return code from the DCRM indi-
cates that the message is greater than one buffer. This is
either an internal DRDS error or an internal DCRM error.

This abend reason code is issued by the following CSECTs:

DSNLXQPR, DSNLXSQD

System Action: A record is written to SYS1.LOGREC and an
SVC dump is requested at the site of the DB2 abend.

Operator Response: Notify the system programmer.

System Programmer Response: Determine which sites the
abending agent was connected to by examining the DSNL027
and DSNL028 SYSLOG console messages at the site of the
DB2 abend. Obtain copies of the SYS1.LOGREC and
SYSLOG data sets or similar data from each connected site,
the SVC dump at the site of the DB2 failure, and any related
crashes from each connected site. Refer to Section 3 of DB2
Diagnosis Guide and Reference for information on identifying
and reporting the problem.

Problem Determination: Collect the following diagnostic
items listed in Appendix B, “Problem determination” on
page 1051 56, 57.
00D34410

Explanation: The distributed relational data system (DRDS) received an invalid return code from the data communications resource manager (DCRM) on a RECEIVE request. This is an internal DCRM error.

This abend reason code is issued by the following CSECTs: DSNLXQOF, DSNLXQFH

System Action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator Response: Notify the system programmer.

System Programmer Response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051

00D34411

Explanation: The distributed relational data system (DRDS) detected an internal inconsistency. An invalid state is specified. This is an internal DRDS error.

This abend reason code is issued by the following CSECTs: DSNLXQPF, DSNLXQFH, DSNLXRTR

System Action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator Response: Notify the system programmer.

System Programmer Response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051

00D34412

Explanation: The distributed relational data system (DRDS) detected an internal inconsistency. An internal buffer offset variable contains an invalid value. This is an internal DRDS error.

This abend reason code is issued by the following CSECT: DSNLXQGT

System Action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator Response: Notify the system programmer.

System Programmer Response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051

00D34413

Explanation: The data header on the message received from the responding site contains invalid information. This is an internal error.

This abend reason code is issued by the following CSECTs: DSNLXQGT, DSNLXQFH

System Action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator Response: Notify the system programmer.

System Programmer Response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051

00D34414

Explanation: The relational data system (RDS) did not specify an area for the null indicator of the data. This is an internal error.

This abend reason code is issued by the following CSECT: DSNLXQGT

System Action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator Response: Notify the system programmer.

System Programmer Response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051
00D34415

Explanation: The input host variable SQLDA format specified in the RDI is not valid. This is an internal error.

This abend reason code is issued by the following CSECT: DSNLXIVB

System Action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator Response: Notify the system programmer.

System Programmer Response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 56, 57.

00D34416

Explanation: An incomplete response was received on a conversation when a complete response was expected.

This abend reason code is issued by the following CSECT: DSNLXQFH

System Action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator Response: Notify the system programmer.

System Programmer Response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 56, 57.

00D34417

Explanation: DRDS detected an illegal attempt to enter Continuous Block Fetch mode.

This abend reason code is issued by the following CSECT: DSNLXQFH

System Action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator Response: Notify the system programmer.

System Programmer Response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 56, 57.

00D34418

Explanation: The remote server was not successfully connected. The SYSIBM.USERNAMES table did not contain an outbound row, the TYPE column specified as an ‘O’ describing the remote authorization identifier to be used for the plan owner DB2 authorization ID. When the USERNAMES column in SYSIBM.LUNAMES specifies ‘O’ or ‘B’ requiring outbound name translation, the SYSIBM.USERNAMES table must contain entries describing the remote authorization IDs to be used for each DB2 authorization ID communicating with the LU.

This reason code is issued by the following CSECT: DSNLXQAL

System Action: A resource unavailable is returned to the application. The request is not sent to the remote site.

Operator Response: Notify the communications database administrator.

System Programmer Response: Make sure the USERNAMES column in SYSIBM.LUNAMES has been specified correctly for the indicated LUNAME. If you intend to use remote authorization IDs that differ from DB2 authorization IDs, verify that the SYSIBM.USERNAMES table has rows that correctly specify the remote authorization ID to be used for each possible DB2 authorization ID.

Problem Determination: Analyze the SYSIBM.USERNAMES table for an incorrect or missing entry.

00D34419

Explanation: RDS has passed an invalid DESCRIBE request to DRDS. This is an internal error.

This abend reason code is issued by the following CSECT: DSNLXRDS

System Action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator Response: Notify the system programmer.

System Programmer Response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 56, 57.
00D3441B
Explanation: DRDS detected an invalid use of a conversation.

This abend reason code is issued by the following CSECT: DSNLXCNV

System Action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator Response: Notify the system programmer.

System Programmer Response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” or page 1051 56, 57.

00D3441C
Explanation: Allocation of the distributed processing services block (DPSB) failed.

This abend reason code is issued by the following CSECTs:

DSNLXCNV DSNLXQCL DSNLXQEX DSNLXQFH
DSNLXQOP DSNLXQPR DSNLXSQD DSNLXQXI

System Action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator Response: Notify the system programmer.

System Programmer Response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” or page 1051 56, 57.

00D3441D
Explanation: The distributed relational data system (DRDS) subcomponent has determined that control structures necessary for processing do not exist. This is a DB2 internal error.

This abend reason code is issued by the following CSECT: DSNLXRUW

System Action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 ABEND.

Operator Response: Notify the system programmer.

System Programmer Response: Determine which sites the ABENDING agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 ABEND. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” or page 1051 56, 57.

00D3441E
Explanation: The distributed relational data system (DRDS) subcomponent has determined that the function to be executed is not a valid function. This is a DB2 internal error.

This abend reason code is issued by the following CSECTs:

DSNLXRCM DSNLXRCN DSNLXRCS DSNLXRQX

System Action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 ABEND.

Operator Response: Notify the system programmer.

System Programmer Response: Determine which sites the ABENDING agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 ABEND. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, left 20the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” or page 1051 56, 57.

00D3441F
Explanation: The distributed relational data system (DRDS) subcomponent is in an invalid state and cannot process the function requested. This is a DB2 internal error.

This abend reason code is issued by the following CSECT: DSNLXRUW

System Action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 ABEND.

Operator Response: Notify the system programmer.

System Programmer Response: Determine which sites the ABENDING agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 ABEND. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” or page 1051 56, 57.
00D34420

Explanation: The application executed a dynamic COMMIT or ROLLBACK operation while executing in an environment in which DB2 is not coordinating the COMMIT/ROLLBACK process (for example, IMS or CICS). This is an application error.

This abend reason code is issued by the following CSECT: DSNLXRUSW

System Action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator Response: Notify the system programmer.

System Programmer Response: Determine which sites the ABENDING agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 ABEND. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

00D34422

Explanation: The distributed relational data system (DRDS) subcomponent has received an unexpected return code from the Distributed Transaction Manager (DTM) subcomponent during CONNECT processing. This is a DB2 internal error.

This abend reason code is issued by the following CSECT: DSNLXRCN

System Action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 ABEND.

Operator Response: Notify the system programmer.

System Programmer Response: Determine which sites the ABENDING agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 ABEND. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

00D34423

Explanation: The distributed relational data system (DRDS) subcomponent has received an unexpected return code from the Distributed Data Interchange Service (DDIS) subcomponent on an invocation to parse a reply. This is a DB2 internal error.

This abend reason code is issued by the following CSECTs:

System Action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 ABEND.

Operator Response: Notify the system programmer.

System Programmer Response: Determine which sites the ABENDING agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 ABEND. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

00D34424

Explanation: The distributed relational data system (DRDS) subcomponent has received an unexpected return code from the Distributed Data Interchange Service (DDIS) subcomponent on an invocation to parse a reply. This is a DB2 internal error.

This abend reason code is issued by the following CSECTs:

System Action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 ABEND.

Operator Response: Notify the system programmer.

System Programmer Response: Determine which sites the ABENDING agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 ABEND. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.
00D34426

Explanation: The distributed relational data system (DRDS) subcomponent has detected an invalid date format in DSNHDECP. This is a DB2 internal error.

This abend reason code is issued by the following CSECT: DSNLXRRCM

System Action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 ABEND.

Operator Response: Notify the system programmer.

System Programmer Response: Determine which sites the ABENDing agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 ABEND. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 56, 57.

00D34427

Explanation: The distributed relational data system (DRDS) subcomponent has detected an invalid time format in DSNHDECP. This is a DB2 internal error.

This abend reason code is issued by the following CSECT: DSNLXRRCM

System Action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 ABEND.

Operator Response: Notify the system programmer.

System Programmer Response: Determine which sites the ABENDing agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 ABEND. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 56, 57.
Appendix B, "Problem determination" on page 1051

00D3442E

Explanation: The distributed relational data system (DRDS) subcomponent has detected an inconsistency processing a request using advanced SQL protocols (ASP) of distributed relational database architecture at the local DB2.

The local DB2 has received an ENDUOWRM that indicates that the remote server processed a dynamic COMMIT request successfully; however, the SQLCARD that accompanies the ENDUOWRM contains a negative SQL return code.

This reason code is issued by the following CSECT: DSNLXRA

System Action: An alert is generated. If this error has not been previously detected, then message DSNL031I is written to the MVS console and trace record containing the reply from the remote server are written in statistics class 4. If the error was already detected, information from the previous occurrence can be used to diagnose the problem.

During execution the application will receive an SQLCODE -30020 for this operation. Subsequent requests within this unit of work will receive an SQLCODE -900 or -906.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of "DB2 Diagnosis Guide and Reference" for information on identifying and reporting the problem.

Problem Determination: Examine the trace record associated with the failing request's LUWID to determine the reply message and data that was received by the local DB2. Consult with the remote server system programmer to diagnose the problem.

At the local DB2, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 5, 83.

At the remote server, collect the following items listed in Appendix B, "Problem determination" on page 1051: 1, 49.

00D34431

Explanation: The distributed relational data system (DRDS) subcomponent encountered an error while processing a FREE package request. This is a DB2 internal error.

This abend reason code is issued by the following CSECT: DSNLXRUW

System Action: The request was not processed successfully.

00D34432

Explanation: The Distributed Relational Data System (DRDS) subcomponent encountered a positive SQL return code during remote program BIND processing. This is a DB2 internal error.

This abend reason code is issued by the following CSECT: DSNLXRUW

System Action: The request was successfully processed.

00D34433

Explanation: The distributed relational data system (DRDS) subcomponent encountered a negative SQL return code during remote program BIND processing. This is a DB2 internal error.

This abend reason code is issued by the following CSECT: DSNLXRUW

System Action: The request was not successfully processed.
00D34434

**Explanation:** The distributed relational data system (DRDS) subcomponent was forced to deallocate the conversation. This is a DB2 internal error.

**System Action:** The request was not processed successfully.

00D34436

**Explanation:** The distributed relational data system (DRDS) subcomponent detected that a remote program BIND request specified the local site. This is a DB2 internal error.

This abend reason code is issued by the following CSECT: DSNLXSS

**System Action:** A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 ABEND.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Determine which sites the ABENDING agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 ABEND. Obtain copies of the SYS1.LOGRREC and SYSLOG data sets from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. Refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 56, 57.

00D34438

**Explanation:** The distributed relational data system (DRDS) subcomponent received an invalid SQLD value from the Relational Data System (RDS) component as a result of a DESCRIBE request. This is a DB2 internal error.

This abend reason code is issued by the following CSECT: DSNLXSSL

**System Action:** A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 ABEND.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Determine which sites the ABENDING agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 ABEND. Obtain copies of the SYS1.LOGRREC and SYSLOG data sets from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. Refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 56, 57.

00D3443A

**Explanation:** The database access request from a remote site failed because the SYSIBM.USERNAMES table did not contain an inbound row, the TYPE column specified as an 'I' describing the DB2 authorization ID to be used for the remote plan owner authorization ID. When the USERNAMES column in SYSIBM.LUNAMES specifies 'I' or 'B', requiring inbound name translation, the SYSIBM.USERNAMES table must contain entries describing which DB2 authorization IDs are to be used for each remote authorization ID from the LU.

This abend reason code is issued by the following CSECT: DSNLXSLCA

**System Action:** The DSNL030I message is issued at the server. The database access agent is not allocated.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Make sure the USERNAMES column in SYSIBM.LUNAMES has been specified correctly for the indicated LUNAME. If you intend to use remote authorization IDs that differ from the DB2 authorization IDs, verify that the SYSIBM.USERNAMES table has rows that correctly specify the DB2 authorization IDs to be used for every possible remote authorization ID.

**Problem Determination:** Analyze the SYSIBM.USERNAMES table for an incorrect or missing entry.

00D3443B

**Explanation:** The distributed relational data system (DRDS) subcomponent has detected an inconsistency processing a chained request using advanced SQL protocols (ASP) of distributed relational database architecture at the local DB2.

Examples of inconsistencies follow:

- The local DB2 believes that the chain is intact but the remote server believes that the chain has been severed.
- The local DB2 believes that the chain has been severed but the remote server believes that the chain is intact.
- The local DB2 has received a negative SQL return code while processing a response to BEGIN BIND yet the remote server has not severed the chain.

This reason code is issued by the following CSECTs: DSNLXRCL, DSNLXROX

**System Action:** An alert is generated. If this error has not been previously detected, then message DSNL031I is written to the MVS console and trace record containing the reply from the remote server are written in statistics class 4. If the error was already detected, information from the previous occurrence can be used to diagnose the problem.

During BIND, the application will receive a DSNT500I message. During execution the application will receive an SQLCODE -904 for this operation. Subsequent requests within this unit of work will receive an SQLCODE -900 or -906.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** Examine the trace record associated with the failing request’s LUWID to determine the reply message and data that was received by the local DB2. Consult with the remote server system programmer to diagnose the problem.
At the local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 5, 83.

At the remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 49.

00D3443C
Explanation: The distributed relational data system (DRDS) received an invalid return code from the relational data system (RDS) on a string translation request. This is a DRDS internal error.

This reason code is issued by the following CSECT: DSNLXQT

System Action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator Response: Notify the system programmer.

System Programmer Response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LGREC and SYSLOG data sets from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 49.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 56, 57.

00D3443D
Explanation: The database access request from a remote site failed because the SYSIBM.USERNAMES table did not contain an inbound row, the TYPE column specified as an ‘I’ describing the DB2 authorization ID to be used for the remote package owner authorization ID. When the USERNAMES column in SYSIBM.USERNAMES specifies ‘I’ or ‘B’ requiring inbound name translation, the SYSIBM.USERNAMES table must contain entries describing which DB2 authorization IDs are to be used for each remote authorization ID from the LU.

This reason code is issued by the following CSECT: DSNLXALC

System Action: The DSNL030I message is issued at the server. The database access agent is not allocated.

Operator Response: Notify the communications database administrator.

System Programmer Response: Make sure the USERNAMES column in SYSIBM.USERNAMES has been specified correctly for the indicated LUNAME. If you intend to use remote authorization IDs that differ from DB2 authorization IDs, verify that the SYSIBM.USERNAMES table has rows that correctly specify the remote authorization ID to be used for every possible remote authorization ID.

Problem Determination: Analyze the SYSIBM.USERNAMES table for an incorrect or missing entry.

00D3443E
Explanation: The database access request from a remote site failed because the SYSIBM.USERNAMES table did not contain an inbound row, the TYPE column specified as an ‘I’ describing the DB2 authorization ID to be used for the remote package owner authorization ID. When the USERNAMES column in SYSIBM.USERNAMES specifies ‘I’ or ‘B’ requiring inbound name translation, the SYSIBM.USERNAMES table must contain entries describing which DB2 authorization IDs are to be used for each remote authorization ID from the LU.

This reason code is issued by the following CSECT: DSNLXRCM

System Action: The database access agent is not allocated.

Operator Response: Notify the communications database administrator.

System Programmer Response: Make sure the USERNAMES column in SYSIBM.USERNAMES has been specified correctly for the indicated LUNAME. If you intend to use remote authorization IDs that differ from DB2 authorization IDs, verify that the SYSIBM.USERNAMES table has rows that correctly specify the remote authorization ID to be used for every possible remote authorization ID.

Problem Determination: Analyze the SYSIBM.USERNAMES table for an incorrect or missing entry.
Collect the following diagnostic items at the remote server.

Collect the following diagnostic items at the local DB2.

DSNL031I message should be analyzed.

identified by the IFCID sequence number enumerated in the

System Programmer Response: None is required.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

User Response: Reissue the BIND subcommand.

System Programmer Response: Notify the system programmer.

DNSLXRWU

System Action: The BIND is not successful.

Explanation: A timeout or deadlock was detected during remote bind processing. This can occur during BIND, REBIND, or FREE.

This reason code is issued by the following CSECT: DSNLXRWU

DSNL031I is written to the console. Refer to the description of this message for further information.

System Action:

An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

Operator Response: Notify the system programmer.

System Programmer Response:

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

Collect the following diagnostic items at the local DB2.

• Statistics class 4 trace record identified by the IFCID sequence number specified in message DSNL031I.

Collect the following diagnostic items at the remote server.

• Relevant error and system logs spanning the time of the failure.

• Any relevant remote server trace information or dumps.

DNSLXRWU

System Action: The BIND is not successful.

Explanation: A timeout or deadlock was detected during remote bind processing. This can occur during BIND, REBIND, or FREE.

This reason code is issued by the following CSECT: DSNLXRWU

User Response: Reissue the BIND subcommand.

System Programmer Response: None is required.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

DNSL031I is written to the console. Refer to the description of this message for further information.

System Action:

An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

Operator Response: Notify the system programmer.

System Programmer Response:

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

00D3500

Explanation: DB2 has detected a DRDA exception condition. This is a generic reason code that describes a situation not covered by any other reason codes.

This reason code is issued by the following CSECT: DSNLXX

System Action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

Operator Response: Notify the system programmer.

System Programmer Response:

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

Collect the following diagnostic items at the local DB2.

• Statistics class 4 trace record identified by the IFCID sequence number specified in message DSNL031I.

Collect the following diagnostic items at the remote server.

• Relevant error and system logs spanning the time of the failure.

• Any relevant remote server trace information or dumps.

DNSLXX

System Action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

Operator Response: Notify the system programmer.

System Programmer Response:

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

DNSL031I is written to the console. Refer to the description of this message for further information.

System Action:

An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

Operator Response: Notify the system programmer.

System Programmer Response:

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

DNSL031I is written to the console. Refer to the description of this message for further information.

System Action:

An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

Operator Response: Notify the system programmer.

System Programmer Response:

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

DNSL031I is written to the console. Refer to the description of this message for further information.

System Action:

An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

Operator Response: Notify the system programmer.

System Programmer Response:

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

DNSL031I is written to the console. Refer to the description of this message for further information.

System Action:

An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

Operator Response: Notify the system programmer.

System Programmer Response:

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

DNSL031I is written to the console. Refer to the description of this message for further information.

System Action:

An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

Operator Response: Notify the system programmer.

System Programmer Response:

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.
At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 83. At this remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 49.

00D35103

Explanation: DB2 has detected an error in the DDM reply message or DDM reply data object received from the remote server in response to a DDM command. Multiple instances of a DDM reply data object, defined within DDM level 3 as non-repeatable, have been returned.

This reason code is issued by the following CSECT: DSNLZRPA

System Action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 83.

At this remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 49.

00D35104

Explanation: DB2 has detected an error in the DDM reply message or DDM reply data object received from the remote server in response to a DDM command. The reply data object is not defined by DRDA.

This reason code is issued by the following CSECT: DSNLZRPA

System Action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30071 and SQLSTATE 58015.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

Collect the following diagnostic items at this local DB2.

- Statistics Class 4 trace record identified by the IFCID sequence number specified in message DSNL031I.

Collect the following diagnostic items at the remote server.

- Relevant error and system logs spanning the time of the failure.
- Any relevant remote server trace information or dumps.

00D35105

Explanation: DB2 has detected an error in the DDM reply message or DDM reply data object received from the remote server in response to a DDM command. While defined by DDM Level 3 as a valid reply object for this command, DB2 does not support the object.

This reason code is issued by the following CSECT: DSNLZRPA

System Action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 83.

At this remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 49.

00D35106

Explanation: DB2 has detected an error in the DDM reply message or DDM reply data object received from the remote server in response to a DDM command. The object must be contained within a single OBJDSS, but was received in an OBJDSS which contained other objects. The object must be contained within a single DSS but was received in a DSS which contained other DDM objects.

This reason code is issued by the following CSECT: DSNLZRPA

System Action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 83.

At this remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 49.
00D35107

Explanation:  DB2 has detected an error in the DDM SQLDTARD reply data object received in response to a DDM command. The application will receive SQLCODE -30000 and SQLSTATE 58008.

System Action:  An alert is generated and message DSNL0311 is written to the console. Refer to the description of this message for further information.

Operator Response:  Notify the system programmer.

System Programmer Response:  If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination:  The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL0311 message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

At this remote DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

00D35108

Explanation:  DB2 has detected an error in the DDM SQLDTARD reply data object received in response to a DDM command. The DDM Level-3 SQLDTARD object is a collection consisting of the FDODSC and FDODTA scalars. The FDODSC scalar, containing a single row on SELECT, is not contained with the SQLDTARD reply data object. The DDM SQLDTARD object is a collection which contains the FDODSC and FDODTA DDM objects. The FDODTA element, containing the single row, is not contained within the SQLDTARD reply data object.

This reason code is issued by the following CSECT: DSNLZRPA

System Action:  An alert is generated and message DSNL0311 is written to the console. Refer to the description of this message for further information.

Operator Response:  Notify the system programmer.

System Programmer Response:  If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination:  The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL0311 message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

At this remote DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

00D35109

Explanation:  DB2 has detected an error in the DDM SQLDTARD reply data object received in response to a DDM command. The DDM SQLDTARD object is a collection consisting of the FDODSC and FDODTA scalars. The FDODSC scalar, describing a single row returned on SELECT, is not contained with the SQLDTARD reply data object. The DDM SQLDTARD object is a collection which contains the FDODSC and FDODTA DDM objects. The FDODTA element, describing the single row, is not contained within the SQLDTARD reply data object.

This reason code is issued by the following CSECT: DSNLZRPA

System Action:  An alert is generated and message DSNL0311 is written to the console. Refer to the description of this message for further information.

Operator Response:  Notify the system programmer.

System Programmer Response:  If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination:  The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL0311 message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

At this remote DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.
At this remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

**00D3510B**

**Explanation:** DB2 has detected an error in the DDM SQLDTARD reply data object received in response to a DDM EXCSQLSTT command. The SQL operation is a SELECT and the size of the resultant row, contained with the FDODTA scalar, exceeds 32KB. The FDOMDTA DDM extended length field required to support this is invalid. The SQL operation is a SELECT and the size of the resultant row exceeds 32KB. The DDM extended length field required to support this is invalid.

This reason code is issued by the following CSECT: DSNLZRPA

**System Action:** An alert is generated and message DSNL0311 is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL0311 message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

At this remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

**00D3510D**

**Explanation:** DB2 has detected an error in the DDM reply message or DDM reply data object received from the remote server in response to a DDM command. The DDM object is a TYPDEFNAM signaling a change in machine representation. The length of the DDM object is incorrect.

This reason code is issued by the following CSECT: DSNLZRPA

**System Action:** An alert is generated and message DSNL0311 is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL0311 message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

At this remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

**00D3510E**

**Explanation:** DB2 has detected an error in the DDM reply message or DDM reply data object received from the remote server in response to a DDM command. The DDM object is a TYPDEFNAM signaling a change in machine representation. The value of the DDM object specifies a machine environment which is not supported by DRDA.

This reason code is issued by the following CSECT: DSNLZRPA

**System Action:** An alert is generated and message DSNL0311 is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL0311 message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

At this remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.
Appendix B,

At this local DB2, collect the following diagnostic items listed in DSNL031I message should be analyzed. This reason code is issued by the following CSECT: DSNLZRPA

System Action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 83.

At this remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 49.

Appendix B,

At this remote server, collect the following diagnostic items

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 49.

Appendix B,

At this local DB2, collect the following diagnostic items listed in DSNL031I message should be analyzed. This reason code is issued by the following CSECT: DSNLZRPA

System Action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 83.

At this remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 49.

Appendix B,

At this remote server, collect the following diagnostic items

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 49.

Appendix B,

At this local DB2, collect the following diagnostic items listed in DSNL031I message should be analyzed. This reason code is issued by the following CSECT: DSNLZRPA

System Action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 83.

At this remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 49.

Appendix B,

At this remote server, collect the following diagnostic items

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 49.
00D35113

**Explanation:** DB2 has detected an error in the DDM reply message or DDM reply data object received from the remote server in response to a DDM command. The length of the DDM reply message is inconsistent with the length of its DSS carrier.

This reason code is issued by the following CSECT: DSNLZRPA

**System Action:** An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

- Any relevant remote server trace information or dumps.

00D35116

**Explanation:** DB2 has detected an error in the DDM reply message or DDM reply data object received from the remote server in response to a DDM command. The length of the DDM reply message is inconsistent with the length of its DSS carrier.

This reason code is issued by the following CSECT: DSNLZRPA

**System Action:** An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

Collect the following diagnostic items at this local DB2.

- Statistics class 4 trace record identified by the IFCID sequence number specified in message DSNL031I.

Collect the following diagnostic items at the remote server.

- Relevant error and system logs spanning the time of the failure.
- Any relevant remote server trace information or dumps.

00D35115

**Explanation:** DB2 has detected an error in the DDM reply message or DDM reply data object received from the remote server in response to a DDM command. The sum of the lengths of the constituent DDM objects within an OBJDSS is inconsistent with the length of the DSS carrier.

This reason code is issued by the following CSECT: DSNLZRPA

**System Action:** An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

Collect the following diagnostic items at this local DB2.

- Statistics class 4 trace record identified by the IFCID sequence number specified in message DSNL031I.

Collect the following diagnostic items at the remote server.

- Relevant error and system logs spanning the time of the failure.
- Any relevant remote server trace information or dumps.
Appendix B

At this local DB2, collect the following diagnostic items listed in the DSNL031I message.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number included in the DSNL031I message should be analyzed.

Collect the following diagnostic items at this local DB2.

- Statistics class 4 trace record identified by the IFCID sequence number included in message DSNL031I.

Collect the following diagnostic items at the remote server.

- Relevant error and system logs spanning the time of the failure.
- Any relevant remote server trace information or dumps.

Appendix B

Explanation: DB2 has detected an error in the SQLDTARD reply data object received in response to an EXCSQLSTT DDM command. The FDODTA element of the SQLDTARD collection contains a null SQLDTAGRP containing no data and a null SQLCAGRP, indicating that the SQL SELECT operation was successful. This is an inconsistency.

This reason code is issued by the following CSECT: DSNLZRP.

System Action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number included in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051.

At this remote server, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051.

Appendix B

Explanation: DB2 has detected an error in the SQLDTARD reply data object received in response to an EXCSQLSTT DDM command. The FDODTA element of the SQLDTARD collection contains a null SQLDTAGRP containing no data and a null SQLCAGRP, indicating that the SQL SELECT operation was successful. This is an inconsistency.

This reason code is issued by the following CSECT: DSNLZRP.

System Action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30020 and SQLSTATE 58009.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number included in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051.

At this remote server, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051.

Appendix B

Explanation: DB2 has detected an error in the DDM reply data object received from the application server (AS) in response to a DDM command. The DDM minimum level attribute of the reply message (that is, the level of DDM required to support the reply message) exceeds the DDM level of the AS specified during CONNECT processing.

This reason code is issued by the following CSECT: DSNLZRP.

System Action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30020 and SQLSTATE 58009.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number included in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051.

At this remote server, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051.
00D3511B

Explanation: DB2 has detected an error in the DRDA summary component received from the remote server in response to a DDM EXCSQLSTT command that generated query result sets. The DRDA summary component should consist of the DDM RSLSETRM reply message, a DDM SQCARD or SQDLTARD reply data object, and a DDM SQRLSRLD reply data object. The SQRLSRLD object is not contained in the summary component.

This reason code is issued by the following CSECT: DSNLZRP.

System Action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30020 and SQLSTATE 58009.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Analyze the statistics class 4 trace record identified by the IFCID sequence number given in message DSNL031I.

At the DB2 requester, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 83.

If the DRDA server is DB2 for OS/390, then DB2 diagnostic information is available. In this case, at the DB2 server, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1.

00D3511D

Explanation: DB2 has detected an error in the DRDA summary component or the DRDA result set component received from the remote server in response to a DDM EXCSQLSTT command that generated query result sets. The DRDA summary component should consist of the DDM RSLSETRM reply message, a DDM SQCARD or SQDLTARD reply data object, and a DDM SQRLSRLD reply data object. The DRDA result set component should consist of at least the DDM OPNQRYRM reply message and the DDM QRYDSC reply data object. The OPNQRYRM message is not present following the SQRLSRLD object.

This reason code is issued by the following CSECT: DSNLZRP.

System Action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30020 and SQLSTATE 58009.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Analyze the statistics class 4 trace record identified by the IFCID sequence number given in message DSNL031I.

At the DB2 requester, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 83.

If the DRDA server is DB2 for OS/390, then DB2 diagnostic information is available. In this case, at the DB2 server, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1.

00D3511C

Explanation: DB2 has detected an error in the DRDA summary component received from the remote server in response to a DDM EXCSQLSTT command that generated query result sets. The DRDA summary component should consist of the DDM RSLSETRM reply message, a DDM SQCARD or SQDLTARD reply data object, and a DDM SQRLSRLD reply data object. The SQRLSRLD reply data object was not preceded by the RSLSETRM reply message.

This reason code is issued by the following CSECT: DSNLZRP.

System Action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30020 and SQLSTATE 58009.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Analyze the statistics class 4 trace record identified by the IFCID sequence number given in message DSNL031I.

At the DB2 requester, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 83.

If the DRDA server is DB2 for OS/390, then DB2 diagnostic information is available. In this case, at the DB2 server, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1.

00D351FF

Explanation: DB2 received a DDM reply message from the remote server in response to a DDM command. The reply message, while valid for the DDM command, indicates that the DDM command and hence the SQL statement was not successfully processed. The application is notified of the failure through the architetected SQLCODE (-300xx) and associated SQLSTATE.

This reason code is issued by the following CSECT: DSNLZRP.

System Action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number included in the DSNL031I message should be analyzed.
Collect the following diagnostic items at this local DB2:

- Statistics class 4 trace record identified by the IFCID sequence number specified in message DSNL031I.

Collect the following diagnostic items at the remote server:

- Relevant error and system logs spanning the time of the failure.
- Any relevant remote server trace information or dumps.

---

**00D35201**

**Explanation:** DB2 has detected an error in the DDM reply message or DDM reply data object received from the remote server in response to a DDM command. The DDM object is the FDODSC element of an SQLDTARD. The size of the FDODSC is greater than 32KB and the DDM level 6b extended length field is invalid.

This reason code is issued by the following CSECT: DSNLZRDS

**System Action:** An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

At this remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

---

**00D35202**

**Explanation:** DB2 has detected an error in the QRYDSC or SQLDTARD reply data object received in response to an OPNQRY or EXCSQLSTT DDM command. The DDM object is either a QRYDSC or the FDODSC scalar of the SQLDTARD collection. The FDOCA geometry is incorrect. The SQLCADTA row triplet (RLO) is either invalid or has not been included with the SQLDTARD descriptor.

This reason code is issued by the following CSECT: DSNLZRDS

**System Action:** An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

At this remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

---

**00D35203**

**Explanation:** DB2 has detected an error in the QRYDSC or SQLDTARD reply data object received in response to an OPNQRY or EXCSQLSTT DDM command. The DDM object is either a QRYDSC or the FDODSC scalar of the SQLDTARD collection. The FDOCA geometry is incorrect. Either the first component of the SQLCADTA row is other than an SQLCAGR (early) group or the number of elements taken from the SQLCAGR or SQLCAGR replication factor (or both) are incorrect. The descriptor is invalid. The DDM object is either a QRYDSC or the FDODSC element of the SQLDTARD collection. The FDOCA geometry is incorrect. The first elements of the row are other than the elements of the early SQLCAGR. The descriptor is invalid.

This reason code is issued by the following CSECT: DSNLZRDS

**System Action:** An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.
At this local DB2, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051.

At this remote server, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051.

---

**00D35205**

**Explanation:** DB2 has detected an error in the QRYDSC or SQLDTARD reply data object received in response to an OPNQRY or EXCSQLSTT DDM command. The DDM object is either a QRYDSC or the FDODSC scalar of the SQLDTARD collection. The FDOCA geometry is incorrect. The first component of the SQLCADTA row correctly enumerates the elements of the SQLCAGRP; however, the second component, identifying the SQLDTAGRPR (late) group is incorrect. Either the SQLTAGRP local identifier (LID) is different than the LID of the SQLDTAGRPR previously specified or the number of elements taken from the SQLDTAGRPR replication factor (or both) are incorrect. The descriptor is invalid. The DDM object is either a QRYDSC or the FDODSC element of the SQLDTARD collection. The FDOCA geometry is incorrect. The first elements of the row correctly enumerate the elements of the early SQLCAGRP, however, the local identifier (LID) following the SQLCAGRP LID is different than the LID of the SQLDTAGRPR group previously specified. The descriptor is invalid.

This reason code is issued by the following CSECT: DSNLZRDS

**System Action:** An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051.

At this remote server, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051.

---

**00D35207**

**Explanation:** DB2 has detected an error in the QRYDSC or SQLDTARD reply data object received in response to an OPNQRY or EXCSQLSTT DDM command. The DDM object is either a QRYDSC or the FDODSC scalar of the SQLDTARD collection. The FDOCA geometry is incorrect. Either the SQLDTARD is specified as other than a row triplet (RLO) or the SQLDTARD RLO triplet length is invalid. The descriptor is invalid.

This reason code is issued by the following CSECT: DSNLZRDS

**System Action:** An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051.

At this remote server, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051.

---
**00D35208**

**Explanation:** DB2 has detected an error in the QRYDSC or SQLDTARD reply data object received in response to an OPNQRY or EXCSQSLTST DDM command. The DDM object is either a QRYDSC or the FDODSC scalar of the SQLDTARD collection. The FDOCA geometry is incorrect. Either the SQLCADTA LID referenced within the SQLDTARD RLO did not match the LID defined within the SQLCADTA RLO or the number of elements or replication factor (or both) within the SQLDTARD RLO was non zero. The descriptor is invalid.

This reason code is issued by the following CSECT: DSNLZRDS

**System Action:** An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

If this DB2 is the AR for the thread, the DDM object received is an SQLDTA or QRYDSC. The application will receive SQLCODE -30000 and SQLSTATE 58008. If this DB2 is an remote server for the thread, the DDM object received is SQLDTA. DSCINVRM will be returned to the AR.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

Collect the following diagnostic items at the remote server.

- Statistics class 4 trace record identified by the IFCID sequence number specified in message DSNL031I.
- Collect the following diagnostic items at the remote server.
  - Relevant error and system logs spanning the time of the failure.
  - Any relevant remote server trace information or dumps.

---

**00D35209**

**Explanation:** DB2 has detected an error in the QRYDSC or SQLDTARD reply data object received in response to an OPNQRY or EXCSQSLTST DDM command. The DDM object is either a QRYDSC or the FDODSC scalar of the SQLDTARD collection. The FDOCA geometry is incorrect. Either the length is specified in the LL preceding the QRYDSC or the FDODSC is greater than the length of the OBJDSS carrier or the length of one of the constituent geometries (triplet lengths) is inconsistent with the length of the QRYDSC or FDODSC. The descriptor is invalid.

This reason code is issued by the following CSECT: DSNLZRDS

**System Action:** An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

---

**00D3520A**

**Explanation:** DB2 has detected an error in the SQLDTARD reply data object received in response to an EXCSQSLTST DDM command. The DDM object is the FDODSC scalar of the SQLDTARD collection and is contained within multiple DDM Level 6b OBJDSS carriers. The descriptor is invalid. The DDM object is the FDODSC scalar of the SQLDTARD collection. The SQLDTARD is contained in multiple level 6b object DSSs. The descriptor is invalid.

This reason code is issued by the following CSECT: DSNLZRDS

**System Action:** An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in [Appendix B, “Problem determination” on page 1051](#) 83.

At this remote server, collect the following diagnostic items listed in [Appendix B, “Problem determination” on page 1051](#) 1, 49.

---

**00D3520B**

**Explanation:** DB2 has detected an error in the DDM reply message or DDM reply data object received from the remote server in response to a DDM command. The DDM object is a QRYDSC returned from an OPNQRY command which spans multiple DDM level 6b DSSs. One or more of the containing level 6b DSSs is (are) other than an object (OBJ) DSS. The descriptor is invalid.

This reason code is issued by the following CSECT: DSNLZRDS

**System Action:** An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in [Appendix B, “Problem determination” on page 1051](#) 83.

At this remote server, collect the following diagnostic items listed in [Appendix B, “Problem determination” on page 1051](#) 1, 49.
00D3520C

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in [Appendix B, “Problem determination” on page 1051](#).

At this remote server, collect the following diagnostic items listed in [Appendix B, “Problem determination” on page 1051](#). 1, 49.

---

00D3520E

**Explanation:** DB2 has detected an error in the DDM QRYDSC or the DDM SQLCINRD reply data object received from the remote server in response to a DDM EXCSQLSTT command that generated query result sets. The number of columns described by the QRYDSC object is inconsistent with the number of columns described by the DDM SQLCINRD object.

This reason code is issued by the following CSECT: DSNLZRDS.

**System Action:** An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30020 and SQLSTATE 58009.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** Analyze the statistics class 4 trace record identified by the IFCID sequence number given in message DSNL031I.

At the DB2 requester, collect the following diagnostic items listed in [Appendix B, “Problem determination” on page 1051](#) 1, 83.

If the DRDA server is DB2 for OS/390, then DB2 diagnostic information is available. In this case, at the DB2 server, collect the following diagnostic items listed in [Appendix B, “Problem determination” on page 1051](#) 1.

---

00D3520D

**Explanation:** DB2 has detected an error in the QRYDSC reply data object received in response to an OPNQRY DDM command. The QRYDSC contained in one or more query blocks is incomplete, i.e., the entire QRYDSC has not been returned in response to the OPNQRY command.

This reason code is issued by the following CSECT: DSNLZRDS.

**System Action:** An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in [Appendix B, “Problem determination” on page 1051](#) 83.

At this remote server, collect the following diagnostic items listed in [Appendix B, “Problem determination” on page 1051](#) 1, 49.

---

00D35301

**Explanation:** DB2 has detected an error in the DDM reply message received from the remote server in response to a DDM command. The reply message code point is not supported by DDM Level 3.

This reason code is issued by the following CSECT: DSNLZRPY.

**System Action:** An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in [Appendix B, “Problem determination” on page 1051](#) 83.
At this remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 49.

00D35302

**Explanation:** DB2 has detected an error in the DDM reply message received from the remote server in response to a DDM command. The reply message contains one or more constituent instance variables whose code point is not supported by DDM Level 3.

This reason code is issued by the following CSECT: DSNLZRPY

**System Action:** An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 83.

At this remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 49.

00D35304

**Explanation:** DB2 has detected an error in the DDM reply message received from the remote server in response to a DDM command. One or more instance variables, specified by DDM Level 3 as required for this reply message, is (are) not contained within the reply message.

This reason code is issued by the following CSECT: DSNLZRPY

**System Action:** An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 83.

At this remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 49.

00D35303

**Explanation:** DB2 has detected an error in the DDM reply message received from the remote server in response to a DDM command. The length of the reply message is greater than the sum of the lengths of the constituent instance variables.

This reason code is issued by the following CSECT: DSNLZRPY

**System Action:** An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 83.

At this remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 49.
**Explanation:** DB2 has detected an error in the DDM reply message received from the remote server in response to a DDM command. The length of the RDBNAM instance variable is 18 bytes as specified by DDM Level 3, however, bytes 17 and 18 are non blank. DB2 supports only a 16 byte RDBNAM.

This reason code is issued by the following CSECT: DSNLZRPY

**System Action:** An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 83.

At this remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 49.

---

**Explanation:** DB2 has detected an error in the ACCRDBRM reply message received from the remote server as in response to the ACCRDB command. The length of the PRDID instance variable is invalid.

This reason code is issued by the following CSECT: DSNLZRPY

**System Action:** An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 83.

At this remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 49.
**Appendix B, Problem Determination**

At this local DB2, collect the following diagnostic items listed in Appendix B, "Problem determination on page 1051".

At this local DB2, collect the following diagnostic items listed in Appendix B, "Problem determination on page 1051".

At this remote server, collect the following diagnostic items listed in Appendix B, "Problem determination on page 1051".

At this remote server, collect the following diagnostic items listed in Appendix B, "Problem determination on page 1051".

**Explanation:** DB2 has detected an error in the ACCRDBRM reply message received from the remote server in response to ACCRDB DDM command. DB2 is currently disabled to connect to the server specified by the value of the PRDID instance variable.

This reason code is issued by the following CSECT: DSNLZRPY

**System Action:** An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, "Problem determination on page 1051".

At this remote server, collect the following diagnostic items listed in Appendix B, "Problem determination on page 1051".

**Explanation:** DB2 has detected an error in the ACCRDBRM reply message received from the remote server in response to a DDM command. The value of the severity code (SVRCOD) instance variable, as specified by DRDA, is not valid for this reply message.

This reason code is issued by the following CSECT: DSNLZRPY

**System Action:** An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, "Problem determination on page 1051".

At this remote server, collect the following diagnostic items listed in Appendix B, "Problem determination on page 1051".

**Explanation:** DB2 has detected an error in the DDM reply message received from the remote server in response to an ACCRDB DDM command. The value of the severity code (SVRCOD) instance variable, as specified by DRDA, is not valid for this reply message.

This reason code is issued by the following CSECT: DSNLZRPY

**System Action:** An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, "Problem determination on page 1051".

At this remote server, collect the following diagnostic items listed in Appendix B, "Problem determination on page 1051".

**Explanation:** DB2 has detected an error in the ACCRDBRM reply message received from the remote server in response to ACCRDB DDM command. The DDM TYPDEFOVR instance variable, as specified by DRDA, is not other than SNGROWPRC or LMTBLKPRC.

This reason code is issued by the following CSECT: DSNLZRPY

**System Action:** An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, "Problem determination on page 1051".

At this remote server, collect the following diagnostic items listed in Appendix B, "Problem determination on page 1051".

**Explanation:** DB2 has detected an error in the DDM reply message received from the remote server in response to an ACCRDB DDM command. The DDM TYPDEFOVR instance variable, as specified by DRDA, is not other than CCSIDSBC, CCSIDMBC or CCSIDDBC.

This reason code is issued by the following CSECT: DSNLZRPY

**System Action:** An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, "Problem determination on page 1051".

At this remote server, collect the following diagnostic items listed in Appendix B, "Problem determination on page 1051".

**Explanation:** DB2 has detected an error in the DDM reply message received from the remote server in response to an ACCRDB DDM command. The DDM TYPDEFOVR instance variable, a collection, contains a scalar instance variable other than CCSIDSBC, CCSIDMBC or CCSIDDBC.

This reason code is issued by the following CSECT: DSNLZRPY

**System Action:** An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, "Problem determination on page 1051".

At this remote server, collect the following diagnostic items listed in Appendix B, "Problem determination on page 1051".
00D3530E

Explanation: DB2 has detected an error in the ACCRDBRM reply message received from the remote server in response to the ACCRDB DDM command. The length of the TYPEDEFVOR instance variable, a collection, is different than the sum of the lengths of the constituent scalar instance variables.

System Action: An alert is generated and message DSNL0311 is written to the console. Refer to the description of this message for further information.

Operator Response: Notify the system programmer.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number included in the DSNL0311 message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

At this remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

00D35310

Explanation: DB2 has detected an error in the DDM reply message received from the remote server in response to a DDM command. The length of a DDM variable length collection or scalar is different than that specified by DDM Level 3.

System Action: An alert is generated and message DSNL0311 is written to the console. Refer to the description of this message for further information.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL0311 message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

At this remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

00D3530F

Explanation: DB2 has detected an error in the DDM reply message received from the remote server in response to a DDM command. The length of a DDM fixed length collection or scalar is different than that specified by DDM Level 3.

System Action: An alert is generated and message DSNL0311 is written to the console. Refer to the description of this message for further information.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL0311 message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

At this remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

00D35311

Explanation: DB2 detected an error in the DDM reply message received from the application server (AS) in response to a DDM EXCSQLIMM or EXCSQLSTT command. The AS DDM level specified during CONNECT is 4 and an ENDUOWRM was returned signaling that a dynamic COMMIT or ROLLBACK was performed. The correct response from an AS supporting DDM Level 4 is the CMMRQSRRM reply message.

System Action: An alert is generated and message DSNL0311 is written to the console. Refer to the description of this message for further information.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Analyze the statistics class 4 trace record identified by the IFCID sequence number included in the DSNL0311 message.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

At this remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.
Appendix B, DB2 Codes

00D35401

Explanation: DB2 detected an error in the DDM SQLCARD reply data object received from the remote server in response to a DDM command. The object contains nonzero lengths for both the SQLERRMSG_m and SQLERRMSG_s elements as described by the SQLCAXGRP early group descriptor. This is invalid as specified by DRDA.

This reason code is issued by the following CSECT: DSNLZARA

System Action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Analyze the statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message.

00D35501

Explanation: DB2 has detected an error in the DDM SQLDARD reply data object received from the remote server in response to a DDM PRPSQLSTT command. The value of the single element of the SQLNUMGRP, SQLNUM, defining the total number of SQLDAROW occurrences within the SQLDARD array, is either negative or is inconsistent with the size of the SQLDARD array.

This reason code is issued by the following CSECT: DSNLZRDA

System Action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

At this remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

00D35601

Explanation: DB2 has detected an error in command data received from a local DB2, or reply data received from the remote server in response to a DDM command. The command or reply data is described by either an FDOCA early or late descriptor. Any Late descriptors have been previously validated. The data currently being retrieved from the data stream is described by a simple data Array (SDA) defining variable length data whose length is given by a 2 byte length field. The value of the length field is either negative or greater than the maximum length specified by the SDA. The data is inconsistent with the descriptor.

This reason code is issued by the following CSECT: DSNLZFDT

System Action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

If the error occurs within reply data, then the application will receive SQLCODE -30000 and SQLSTATE 58008. If the error occurs within command data, a DDM DTAMCHRM reply message will be returned to the AP.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.
At this local DB2, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 83.

At this remote server, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 49.

---

**00D35602**

**Explanation:** DB2 has detected an error in a SQLSTT, SQLSTTVRB, SQLOBJNAM or SQLDTA data object received from a local DB2. The length of the data to be retrieved from the data stream is defined by an SDA which is part of an early or late descriptor. The length exceeds the length of remainder of the OBJDSS carrier of the command data object. The data is inconsistent with the descriptor.

This reason code is issued by the following CSECT: DSNLZFDT

**System Action:** An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM DTAMCHRM reply message will be returned to the AR.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 83.

At this remote server, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 49.

---

**00D35603**

**Explanation:** DB2 has detected an error in SQLCARD, SQLDARD, or SQLDTARD reply data object received from an remote server in response to a DDM command. The reply data is described by either the SQLCAGRPR or SQLDAGRPR early descriptors or the SQLDTAGRPR (contained within a SQLDTARD) late descriptor. The length of the data to be retrieved is specified by the default length of a constituent SDA within the SQLCAGRPR or SQLDAGRPR early groups or the SDA length specification within the SQLDTAGRPR late group. All OBJDSSs received in response to the DDM command have been processed but the SQLCARD, SQLDARD, or SQLDTARD is incomplete. These must be returned in their entirety. The data is inconsistent with the descriptor.

This reason code is issued by the following CSECT: DSNLZFDT

**System Action:** An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 83.

At this remote server, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 49.

---

**00D35604**

**Explanation:** DB2 has detected an error in SQLCARD, SQLDARD, or SQLDTARD reply data object received from an remote server in response to a DDM command. The reply data is described by either the SQLCAGRPR or SQLDAGRPR early descriptors or the SQLDTAGRPR (contained within a SQLDTARD) late descriptor. The length of the data to be retrieved is specified by the default length of a constituent SDA within the SQLCAGRPR or SQLDAGRPR early groups or the SDA length specification within the SQLDTAGRPR late group. The carrier OBJDSS has been exhausted but the complete object has not been assembled. The object must be contained in exactly one OBJDSS carrier. This is not the case and the data is inconsistent with the descriptor.

This reason code is issued by the following CSECT: DSNLZFDT

**System Action:** An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 83.

At this remote server, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 49.

---

**00D35605**

**Explanation:** DB2 has detected an error in a QRYDTA reply data object received from the remote server in response to a DDM OPNQRY or CNTQRY command. The reply data, described by an SQLDTARD late descriptor carried in a DDM QRYDSC reply data object, has been previously validated. The reply data spans multiple query blocks, each of which are contained in a level 6b DSS. One or more of the containing level 6b DSSs is other than a DDM level 6b object DSS. This is invalid.

This reason code is issued by the following CSECT: DSNLZFDT

**System Action:** An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.
Appendix B, "Problem determination" on page 1051

00D35606

Explanation: DB2 has detected an error in a QRYDTA reply data object received from the remote server in response to a DDM OPNQRY or CNTQRY command. The reply data, described by an SOLQDTRD late descriptor carried in a DDM QRYDSC reply data object, has been previously validated. The reply data spans multiple query blocks, each of which are contained in a level 6b Object DSS (OBJDSS). The code points of one or more of the DMR reply data objects is other than QRYDTA (X'241B'). This is invalid.

This reason code is issued by the following CSECT: DSNLZFDT

System Action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of "DB2 Diagnosis Guide and Reference" for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051

1, 49.

At this remote server, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051

1, 49.

00D35607

Explanation: DB2 has detected an error in a QRYDTA reply data object received from a remote server in response to a DDM OPNQRY or CNTQRY command. The cursor is being processed with single row protocols (SNGROWPRC). The QRYDTA may span multiple query blocks but must be returned in its entirety. This is not the case.

This reason code is issued by the following CSECT: DSNLZFDT

System Action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of "DB2 Diagnosis Guide and Reference" for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051

1, 49.

At this remote server, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051

1, 49.

00D35608

Explanation: DB2 has detected an error in a QRYDTA reply data object received from the remote server in response to a DDM OPNQRY or CNTQRY command. The reply data, described by an SOLQDTRD late descriptor carried in a DDM QRYDSC reply data object, has been previously validated. The current data to be retrieved from the QRYDTA is described by an SDA defining Null-Terminated data (DRDA types X'2C', X'2D', X'2E', X'2F', X'42' or X'43'). The null terminator cannot be located within the reply data. The data is inconsistent with the descriptor defined by the QRYDSC.

This reason code is issued by the following CSECT: DSNLZFDT

System Action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of "DB2 Diagnosis Guide and Reference" for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051

1, 49.

At this remote server, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051

1, 49.

00D35609

Explanation: DB2 detected an error in conversion of numeric data. Possible scenarios are: floating point conversion over-flow, or digits of numeric character out of range.

This reason code is issued by the following CSECT: DSNLZFDT

System Action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application receives SQLCODE -30073 and SQLSTATE 58017.
User Response: Check your numeric data. If you are connecting to DB2 via a non-S/370 type machine, overflow can occur when the floating point value is out of the System/370 floating point range. Refer to Appendix A of DB2 SQL Reference for details of floating point range.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Analyze the statistics class 4 trace record identified by the IFCID sequence number given in message DSNL0311.

At this remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051, 49.

00D35701

Explanation: DB2 has detected an error while processing the SQLDTAGRP late group descriptor, contained within either the DRDA SQLDTARD or SQLDTA late descriptors. The DDM object is either a QRYDSC, SQLDTARD or SQLDTA. The FDOCA geometry is incorrect. The local identifier (LID) of one of the SQLDTAGRP constituent triplets has not been previously defined by a late environmental descriptor and the SQLDTAGRP meta data definition (MDD) is either invalid or has not been included within the descriptor. The descriptor is invalid.

This reason code is issued by the following CSECT: DSNLZGDT

System Action: An alert is generated and message DSNL0311 is written to the console. Refer to the description of this message for further information.

If the error occurs within the QRYDSC or SQLDTARD DDM objects, the application will receive SQLCODE -30000 and SQLSTATE 58008. If the error occurs within the DDM SQLDTA object, a DSCINVRM reply message will be returned to the AR.

Operator Response: Notify the system programmer.

00D35703

Explanation: DB2 has detected an error while processing the SQLDTAGRP late group descriptor, contained within either the DRDA SQLDTARD or SQLDTA late descriptors. The DDM object is either a QRYDSC, SQLDTARD or SQLDTA. The FDOCA geometry is incorrect. The local identifier (LID) of one of the SQLDTAGRP constituent triplets has not been previously defined by a late environmental descriptor and the LID is outside of the bounds of the default environmental descriptor LIDs (LID > X ’49’). Note that the default LIDs are identical to the DRDA types. The descriptor is invalid.

This reason code is issued by the following CSECT: DSNLZGDT

System Action: An alert is generated and message DSNL0311 is written to the console. Refer to the description of this message for further information.

If the error occurs within the QRYDSC or SQLDTARD DDM objects, the application will receive SQLCODE -30000 and SQLSTATE 58008. If the error occurs within the DDM SQLDTA object, a DSCINVRM reply message will be returned to the AR.

Operator Response: Notify the system programmer.

00D35702

Explanation: DB2 has detected an error while processing the SQLDTAGRP late group descriptor, contained within either the DRDA SQLDTARD or SQLDTA late descriptors. The DDM object is either a QRYDSC, SQLDTARD or SQLDTA. The FDOCA geometry is incorrect. The SQLDTAGRP triplet is not defined as an FDOCA nullable group. The descriptor is invalid.

This reason code is issued by the following CSECT: DSNLZGDT
**00D35704**

**Explanation:** DB2 has detected an error while processing the SQLDTAGRGP late group descriptor, contained within either the DRDA SQLTARD or SOLDTA late descriptors. The DDM object is either a QRYDSC, SQLTARD or SOLDTA. The FDOCA geometry is incorrect. The local identifier (LID) of one of the constituent SQLDTAGRGP SDAs has either not been previously defined by a late environmental descriptor, or is not a valid default LID. Note that the default LIDs are identical to the DRDA types. The descriptor is invalid.

This reason code is issued by the following CSECT: DSNLZGDT

**System Action:** An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

If the error occurs within the QRYDSC or SQLTARD DDM objects, the application will receive SQLCODE -30000 and SQLSTATE 58008. If the error occurs within the DDM SOLDTA object, a DSCINVRM reply message will be returned to the local DB2.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

At this remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

**00D35705**

**Explanation:** DB2 has detected an error while processing the SQLDTAGRGP late group descriptor contained within either the DRDA SQLTARD or SOLDTA late descriptors. The DDM object is either a QRYDSC, SQLTARD reply data object, or the SOLDTA command data object. The FDOCA geometry is incorrect. All the OBJDSSS carriers have been processed and the SQLDTAGRGP has not been assembled. The SQLDTAGRGP is incomplete and the descriptor is invalid.

This reason code is issued by the following CSECT: DSNLZGDT

**System Action:** If the error occurs within the QRYDSC or SQLTARD reply data object, the application will receive SQLCODE -30000 and SQLSTATE 58008. If the error occurs within the DDM SOLDTA object, a DSCINVRM reply message will be returned to the local DB2.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

Collect the following diagnostic items at this local DB2.

**00D35706**

**Explanation:** DB2 has detected an error while processing the SQLDTAGRGP late group descriptor, contained within the DRDA SQLTARD or SOLDTA late descriptors. The DDM object is either an SQLTARD or SOLDTA and must be contained within a single OBJDSS. The descriptor, as defined by the length of the SQLTARD or SOLDTA DDM objects, is incomplete and is therefore invalid.

This reason code is issued by the following CSECT: DSNLZGDT

**System Action:** An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

If the error occurs within the SQLTARD DDM object, the application will receive SQLCODE -30000 and SQLSTATE 58008. If the error occurs within the DDM SOLDTA object, a DSCINVRM reply message will be returned to the local DB2.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

At this remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

**00D35707**

**Explanation:** DB2 has detected an error while processing the SQLDTAGRGP late group descriptor, contained within the DRDA SQLTARD late descriptor. The DDM object is a QRYDSC spanning multiple query blocks and DDM Level 6b DSSs. One or more of the containing level 6b DSSs is other than an object (OBJ) DSS. The descriptor is invalid.

This reason code is issued by the following CSECT: DSNLZGDT

**System Action:** An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.
At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

At this remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

00D35708

Explanation: DB2 has detected an error while processing the SQLDTAGRPGP late group descriptor, contained within the DRDA SQLDTARD late descriptor. The DDM object is a QRYDSC spanning multiple query blocks and DDM level object 6b DSSs. The code point of one or more of the containing DDM objects is other than QRYDSC (X’241B’). The descriptor is invalid.

This reason code is issued by the following CSECT: DSNLZGDT

System Action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

At this remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

00D35709

Explanation: DB2 has detected an error while processing the SQLDTAGRPGP late group descriptor contained within a QRYDSC DDM object. The FDODA geometry is incorrect. The SQLDTAGRPGP length specification exceeds the size of the QRYDSC level 6b DSS carrier. The descriptor is invalid.

This reason code is issued by the following CSECT: DSNLZGDT

System Action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

If the remote DRDA client is a DB2 for MVS system, at the DB2 DRDA client, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

00D3570B

Explanation: DB2 has detected an error while processing the SQLDTAGRPGP late group descriptor, contained within the DRDA SQLDTAR late descriptor. The DDM object is the OUTOVR object. A non-zero local identifier (LID) was received as an output override descriptor, but the LID value was not one of the values allowed for the current DRDA level (DRDA Level 4). This is invalid.

This reason code is issued by the following CSECT: DSNLZGDT

System Action: An alert is generated and message DSNL032I is written to the console if the error is detected while parsing a command or message DSNL031I is written to the console if the error is detected while parsing a command reply. Refer to the description of this message for further information.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

If the remote DRDA client is a DB2 for MVS system, at the DB2 DRDA client, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

• Relevant error and system logs spanning the time of the failure.
• Any relevant remote server trace information or dumps.
Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

If the remote DRDA client is a DB2 for MVS system, at the DB2 DRDA server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051. For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

---

**00D35801**

**Explanation:** DB2 has detected an error while processing late environmental descriptors which precede the SQLDTAGRPR late group descriptor, contained within either the SQLDTARD or SQLDTA late descriptors. The DDM object is a QRYDSC, SQLDTARD or SQLDTA. The FDOCA geometry is incorrect. The late environmental descriptor meta data definition does not specify a valid DRDA type. The SDA and the entire descriptor are invalid.

This reason code is issued by the following CSECT: DSNLZLEP

**System Action:** An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

If the error occurs within the QRYDSC or SQLDTARD DDM objects, the application will receive SQLCODE -30000 and SQLSTATE 58008. If the error occurs within the DDM SQLDTA object, a DSCINVRM reply message will be returned to the local DB2.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

---

**00D35803**

**Explanation:** DB2 has detected an error while processing late environmental descriptors which precede the SQLDTAGRPR late group descriptor, contained within either the SQLDTARD or SQLDTA late descriptors. The DDM object is either a QRYDSC, SQLDTARD or SQLDTA. The FDOCA geometry is incorrect. The late environmental descriptor meta data definition (MDD) is valid, however, the descriptor following the MDD is either not an SDA or is an SDA with a length other than 12 (X’0C’). The SDA and the entire descriptor are invalid.

This reason code is issued by the following CSECT: DSNLZLEP

**System Action:** An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

If the error occurs within the QRYDSC or SQLDTARD DDM objects, the application will receive SQLCODE -30000 and SQLSTATE 58008. If the error occurs within the DDM SQLDTA object, a DSCINVRM reply message will be returned to the local DB2.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

---

**00D35802**

**Explanation:** DB2 has detected an error while processing late environmental descriptors which precede the SQLDTAGRPR late group descriptor contained within either the SQLDTARD or SQLDTA late descriptors. The DDM object is either a QRYDSC, SQLDTARD reply data object, or an SQLDTA command data object. The FDOCA geometry is incorrect. The late environmental descriptor meta data definition (MDD) either specifies a local identifier (LID) of 0 or defines a nonrelational database application class (other than X’05’) or the meta data reference type is other than X’01’.

The MDD and the entire descriptor are invalid.

This reason code is issued by the following CSECT: DSNLZLEP

**System Action:** An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

If the error occurs within the QRYDSC or SQLDTARD DDM objects, the application will receive SQLCODE -30000 and SQLSTATE 58008. If the error occurs within the DDM SQLDTA object, a DSCINVRM reply message will be returned to the local DB2.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Collect the following diagnostic items at this local DB2.

- Statistics class 4 trace record identified by the IFCID sequence number specified in message DSNL031I.
- Relevant error and system logs spanning the time of the failure.
- Any relevant remote server trace information or dumps.

00D35806

Explanation: DB2 has detected an error while processing late environmental descriptors which precede the SQLDTAGRP late group descriptor, contained within either the SQLDTARD or SQLDTA late descriptors. The DDM object is a QRYDSC, SQLDTARD, or SQLDTA data object. The FDOCA geometry is incorrect. The size of the late environmental descriptor meta data definition (MDD) is valid, however, the SDA immediately following the MDD is overriding a DRDA type not supported by DRDA. The SDA and the entire descriptor are invalid.

This reason code is issued by the following CSECT: DSNLZLEP

System Action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

If the error occurs within the QRYDSC or SQLDTARD DDM objects, the application will receive SQLCODE -30000 and SQLSTATE 58008. If the error occurs within the DDM SQLDTA object, a DSCINVRM reply message will be returned to the local DB2.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 83.

At this remote server, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 49.

00D35807

Explanation: DB2 has detected an error while processing late environmental descriptors which precede the SQLDTAGRP late group descriptor, contained within either the SQLDTARD or SQLDTA late descriptors. The DDM object is a QRYDSC, SQLDTARD, or SQLDTA data object. The FDOCA geometry is incorrect. The size of the late environmental descriptors exceeds the size of the DDM level 6b DSS carrier. The descriptor is invalid.

This reason code is issued by the following CSECT: DSNLZLEP

System Action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

If the error occurs within the QRYDSC or SQLDTARD DDM objects, the application will receive SQLCODE -30000 and SQLSTATE 58008. If the error occurs within the DDM SQLDTA object, a DSCINVRM reply message will be returned to the local DB2.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 83.

At this remote server, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 49.
Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 83.

At this remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 49.

00D35808

Explanation: DB2 has detected an error while processing late environmental descriptors which precede the SQLDTAGRP late group descriptor, contained within the SQLDTARD late descriptor. The DDM object is a QRYDSC which spans multiple query blocks. One or more of the code points of the DDM objects carrying the descriptor is (are) other than QRYDSC (X’241B’). The descriptor is invalid.

This reason code is issued by the following CSECT: DSNLZLEP

System Action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

If the error occurs within the QRYDSC or SQLDTARD DDM objects, the application will receive SQLCODE -30000 and SQLSTATE 58008. If the error occurs within the DDM SQLDTA object, a DSCINVRM reply message will be returned to the local DB2.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 83.

At this remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 49.

00D35809

Explanation: DB2 has detected an error while processing late environmental descriptors which precede the SQLDTAGRP late group descriptor contained within the SQLDTARD late descriptor. This late descriptor is within a QRYDSC which spans one or more query blocks. The QRYDSC contains only late environmental descriptors and is, therefore, incomplete.

This reason code is issued by the following CSECT: DSNLZLEP

System Action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

Collect the following diagnostic items at the remote server.

- Statistics class 4 trace record identified by the IFCID sequence number specified in message DSNL031I.
- Relevant error and system logs spanning the time of the failure.
- Any relevant remote server trace information or dumps.

00D35901

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data received from a local DB2. A reply DSS (RYPDSS) has been received from the local DB2. This is invalid.

This reason code is issued by the following CSECT: DSNLZSPA

System Action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (PRCCNVDM) will be returned to the local DB2.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 83.

At this remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 49.

00D35902

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data received from a local DB2. The first level 6b DSS received is an object DSS. The DDM command or DDM command data received from a local DB2. A reply DSS (RYPDSS) must be the first level 6b DSS received.

This reason code is issued by the following CSECT: DSNLZSPA

System Action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (PRCCNVDM) will be returned to the local DB2.

Operator Response: Notify the system programmer.
**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 83.

At this remote server, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 49.

---

**00D35903**

**Explanation:** DB2 has detected an error while parsing a DDM command or DDM command data received from a local DB2. The first level 6b DSS received is neither a request (RQS) DSS, Object (OBJ) DSS nor Reply (RPY) DSS and is invalid.

This reason code is issued by the following CSECT: DSNLZSPA

**System Action:** An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the local DB2.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 83.

At this remote server, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 49.

---

**00D35904**

**Explanation:** DB2 has detected an error while parsing a DDM command or DDM command data received from a local DB2. The DDM command, specified by the code point contained within the level 6b RQSDSS, is invalid or not supported by DDM Level 3.

This reason code is issued by the following CSECT: DSNLZSPA

**System Action:** An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (CMDNSPRM) will be returned to the local DB2.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 83.

At this remote server, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 49.

---

**00D35905**

**Explanation:** DB2 has detected an error while parsing a DDM command or DDM command data received from a local DB2. The first DDM command received on this conversation, while a valid DDM Level 3 command, is other than EXCSAT. The first command must be EXCSAT.

This reason code is issued by the following CSECT: DSNLZSPA

**System Action:** An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (RDBNACRM) will be returned to the local DB2.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 83.

At this remote server, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 49.

---

**00D35906**

**Explanation:** DB2 has detected an error while parsing a DDM command or DDM command data received from a local DB2. The EXCSAT command has been successfully processed but the current DDM command, while supported by DDM Level 3 and DB2, has been sent prior to ACCRD. The only valid command prior to ACCRD is another EXCSAT command.

This reason code is issued by the following CSECT: DSNLZSPA

**System Action:** An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (RDBNACRM) will be returned to the local DB2.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 83.
At this remote server, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 49.

00D35907
Explanation: DB2 has detected an error while parsing a DDM command or DDM command data received from an local DB2. The DDM command has been successfully processed, however, one or more of the level 6b DSSs are other than object (OBJ) DSSs. The only valid level 6b DSS chain is a single RQS DSS, followed by one or more OBJ DSSs. This reason code is issued by the following CSECT: DSNLZSPA

System Action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (PRCCNVRM) will be returned to the local DB2.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this remote server, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 83.

00D35908
Explanation: DB2 has detected an error while parsing DDM command data received from a local DB2. The DDM command data object, as defined by the DDM code point, is either invalid or not valid for this command, as specified by DDM level 3. This reason code is issued by the following CSECT: DSNLZSPA

System Action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (OBJNSPRM) will be returned to the local DB2.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 83.

At this remote server, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 49.

00D35909
Explanation: DB2 has detected an error while parsing a DDM command or DDM command data received from an local DB2. The DDM command has been successfully processed, however, one or more of the level 6b DSSs are other than object (OBJ) DSSs. The only valid level 6b DSS chain is a single RQS DSS, followed by one or more OBJ DSSs. This reason code is issued by the following CSECT: DSNLZSPA

System Action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (PRCCNVRM) will be returned to the local DB2.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 83.

At this remote server, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 49.
00D3590B

**Explanation:** DB2 has detected an error while parsing a DDM command or DDM command data received from a local DB2. One or more DDM command data objects, defined as required by DDM Level 3, were not received with the DDM command.

This reason code is issued by the following CSECT: DSNLZSPA

**System Action:** An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the local DB2.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051, 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051, 1, 49.

00D3590C

**Explanation:** DB2 has detected an error while parsing DDM command data received from a local DB2. The DDM object is a TYPDEFNAM, signaling a change in machine representation from the local DB2, however, the length, as specified by DDM level 3, is incorrect.

This reason code is issued by the following CSECT: DSNLZSPA

**System Action:** An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the local DB2.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051, 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051, 1, 49.

00D3590D

**Explanation:** DB2 has detected an error while parsing a DDM command data object received from a local DB2. The DDM object is a TYPDEFNAM, signaling a change in machine representation from the local DB2, however, the value of this DDM scalar is other than QTDSQL370, QTDSQLX86 or QTDSQL400. These are the only valid machine representations supported by DRDA.

This reason code is issued by the following CSECT: DSNLZSPA

**System Action:** An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (VALNSPRM) will be returned to the local DB2.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051, 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051, 1, 49.

00D3590E

**Explanation:** DB2 has detected an error while parsing a DDM command data object received from a local DB2. The DDM object is a TYPDEFNAM, signaling a change in machine representation from the local DB2. This is a DDM collection consisting of three DDM scalars: CCSIDSBC, CCSIDMBC, and CCSIDDDBC. The length of one of the constituent scalars is incorrect.

This reason code is issued by the following CSECT: DSNLZSPA

**System Action:** An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (VALNSPRM) will be returned to the local DB2.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051, 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051, 1, 49.
00D3590F

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data received from a local DB2. The DDM object is a TYPDEFOVR, signaling a change in CCSIDs from the local DB2. This is a DDM collection consisting of three DDM scalars: CCSIDSBC, CCSIDMBC, and CCSIDDDBC. The TYPDEFOVR contains multiple instances of the CCSIDDDBC scalar. This is invalid.

This reason code is issued by the following CSECT: DSNLZSPA

System Action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the local DB2.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in [Appendix B, “Problem determination” on page 1051] 83.

At this DB2 remote server, collect the following diagnostic items listed in [Appendix B, “Problem determination” on page 1051] 1, 49.

00D35910

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data received from a local DB2. The DDM object is a TYPDEFOVR, signaling a change in CCSIDs from the local DB2. This is a DDM collection consisting of three DDM scalars: CCSIDSBC, CCSIDMBC, and CCSIDDDBC. The TYPDEFOVR contains multiple instances of the CCSIDDDBC scalar. This is invalid.

This reason code is issued by the following CSECT: DSNLZSPA

System Action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the local DB2.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in [Appendix B, “Problem determination” on page 1051] 83.

At this DB2 remote server, collect the following diagnostic items listed in [Appendix B, “Problem determination” on page 1051] 1, 49.

00D35911

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data received from a local DB2. The DDM object is a TYPDEFOVR, signaling a change in CCSIDs from the local DB2. This is a DDM collection consisting of three DDM scalars: CCSIDSBC, CCSIDMBC, and CCSIDDDBC. The TYPDEFOVR length exceeds the sums of the lengths of the constituent scalars. This is invalid.

This reason code is issued by the following CSECT: DSNLZSPA

System Action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the local DB2.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in [Appendix B, “Problem determination” on page 1051] 83.

At this DB2 remote server, collect the following diagnostic items listed in [Appendix B, “Problem determination” on page 1051] 1, 49.
00D35913

Explanation: DB2 has detected an error while parsing a DDM command data object received from a local DB2. The DDM object is TYPDEFOVR, signaling a CCSID change from the local DB2. This is a collection consisting of CCSIDSBC, CCSIDMBC, and CCSIDDDBC. The TYPDEFOVR contains an object other than CCSIDSBC, CCSIDDDBC, or CCSIDDDBC. This is invalid.

This reason code is issued by the following CSECT: DSNLZSPA

System Action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

A DDM reply message (VALNSPRM) will be returned to the local DB2.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

Collect the following diagnostic items at this local DB2.

- Statistics class 4 trace record identified by the IFCID sequence number specified in message DSNL031I.

Collect the following diagnostic items at the remote server.

- Relevant error and system logs spanning the time of the failure.
- Any relevant AS trace information or dumps.

00D35914

Explanation: DB2 detected an error while parsing a DDM command received from the application requester (AR). The minimum level attribute of the DDM command received from the AR, (that is, the level of DDM required to support the object) exceeds the DDM level specified by the AR during CONNECT processing.

This reason code is issued by the following CSECT: DSNLZSPA

System Action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

A DDM reply message (PRCCNVRM) is returned to the local DB2.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Analyze the statistics class 4 trace record identified by the IFCID sequence number included in the DSNL032I message.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

At this DB2 remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

00D35915

Explanation: DB2 detected an error while parsing a DDM command data object received from the application requester (AR). The minimum level attribute of the DDM command data object received from the AR (that is, the level of DDM required to support the object) exceeds the DDM level specified by the AR during CONNECT processing.

This reason code is issued by the following CSECT: DSNLZSPA

System Action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (PRCCNVRM) is returned to the local DB2.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Analyze the statistics class 4 trace record identified by the IFCID sequence number included in the DSNL032I message.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

At this DB2 remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

00D35918

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. The DDM command, specified by the code point contained within the level 6b RQSDSS, is invalid or not supported by DDM Level 3.

This reason code is issued by the following CSECT: DSNLZSPA

System Action: A DDM reply message (CMDNSPRM) is returned to the local DB2.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Analyze the statistics class 4 trace record identified by the IFCID sequence number included in the DSNL032I message.

At this local DB2, collect the following diagnostic item listed in Appendix B, “Problem determination” on page 1051.

At this remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

00D35919

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. The negotiated security manager level is greater than or equal to 5, and the required ACCSEC and SECCHK commands were not received before the ACCRDB command.

This reason code is issued by the following CSECT: DSNLZSPA.
00D3591A Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. The negotiated security manager level is less than 5, and an ACCSEC command was received.

This reason code is issued by the following CSECT: DSNLZSPA.

System Action: A DDM reply message (CMDNSPRM) is returned to the local DB2.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix B, “Problem determination” on page 1051 83.

At this remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 49.

00D3591B Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. An ACCSEC command was received when an ACCSEC command had already been executed successfully.

This reason code is issued by the following CSECT: DSNLZSPA.

System Action: The conversation is terminated, and message DSNL030I is issued. Refer to the description of this message for further information.

A DDM reply message (PRCCNVRM) is returned to the local DB2.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix B, “Problem determination” on page 1051 83.

At this remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 49.

00D3591C Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. The negotiated security manager level is less than 5, and a SECCHK command was received.

This reason code is issued by the following CSECT: DSNLZSPA.

System Action: A DDM reply message (MGRDEPRM) is returned to the local DB2.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix B, “Problem determination” on page 1051 83.

At this remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 49.
00D3591E

**Explanation:** DB2 has detected an error while parsing a DDM command or DDM command data. An ACCSEC or SECCHK command was sent after an ACCRDB was successfully processed.

This reason code is issued by the following CSECT: DSNLZSPA.

**System Action:** The conversation is terminated, and message DSNL030I is issued. Refer to the description of this message for further information.

A DDM reply message (PRCCNVRM) is returned to the local DB2.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of **DB2 Diagnosis Guide and Reference** for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix B, “Problem determination” on page 1051.

At this remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

---

00D35A02

**Explanation:** DB2 has detected an error while parsing a DDM command data object received from a local DB2. The DDM object is either an SQLSTT, SQLOBJNAM, or SQLSTTVRB. These objects are described by early group descriptors, each of which contains both SBCS and mixed SDAs describing character data. In all cases, the instantiation of the SBCS and mixed elements are mutually exclusive, i.e. if the SBCS element is sent, then the mixed must not be sent and conversely. Further, either the SBCS or mixed (not both) must be instantiated. The data retrieved from the object instantiates neither the SBCS nor the mixed SDA. This is invalid.

This reason code is issued by the following CSECT: DSNLZSMT

**System Action:** An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the local DB2.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of **DB2 Diagnosis Guide and Reference** for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

At this remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

---

00D35B01

**Explanation:** DB2 has detected an error while parsing an SQLDTA command data object received from a local DB2. The length of the SQLDTA exceeds 32KB, however, the DDM extended length field is invalid.

This reason code is issued by the following CSECT: DSNLZSMT

**System Action:** An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the local DB2.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of **DB2 Diagnosis Guide and Reference** for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

At this remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

---
00D35B02

Explanation: DB2 has detected an error while parsing an SQLDTA command data object received from a local DB2. The SQLDTA is a DDM collection consisting of the FDODSC and FDODTA scalars. The first scalar within the SQLDTA is other than the FDODSC scalar. This is invalid.

This reason code is issued by the following CSECT: DSNLZSDT

System Action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the local DB2.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 49.

00D35B04

Explanation: DB2 has detected an error while parsing an SQLDTA command data object received from a local DB2. The SQLDTA FDOCA descriptor, contained in the FDODSC scalar, includes late environmental descriptors, however, the SQLDTA meta data definition (MDD) is either invalid or has not been included within the SQLDTA descriptor. The descriptor is invalid.

This reason code is issued by the following CSECT: DSNLZSDT

System Action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (DSCINVRM) will be returned to the local DB2.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 49.

00D35B05

Explanation: DB2 has detected an error while parsing an SQLDTA command data object received from a local DB2. The SQLDTA FDOCA descriptor geometry is incorrect. Either the SQLDTA triplet length is incorrect or the SQLDTA triplet type is other than an row layout (RLO). The descriptor is invalid.

This reason code is issued by the following CSECT: DSNLZSDT

System Action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (DSCINVRM) will be returned to the local DB2.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 49.
Appendix B

At this local DB2, collect the following diagnostic items listed in DSNL032I message should be analyzed. Identified by the IFCID sequence number enumerated in the Problem Determination: for information on identifying and reporting the problem.

System Action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the local DB2.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 49.

---

Appendix B

At this local DB2, collect the following diagnostic items listed in DSNL032I message should be analyzed. Identified by the IFCID sequence number enumerated in the Problem Determination: for information on identifying and reporting the problem.

System Action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the local DB2.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 49.

---

Appendix B

At this local DB2, collect the following diagnostic items listed in DSNL032I message should be analyzed. Identified by the IFCID sequence number enumerated in the Problem Determination: for information on identifying and reporting the problem.

System Action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the local DB2.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 49.
00D35C02

**Explanation:** DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. An invalid instance has been received as a parameter on a BNDSQLSTT command.

This reason code is issued by the following CSECT: DSNLZSBD

**System Action:** An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (PRMNSPRM) will be returned to the local DB2.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 49.

00D35C03

**Explanation:** DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. An invalid instance has been received as a parameter on a DRPPKG command.

This reason code is issued by the following CSECT: DSNLZSBD

**System Action:** An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (PRMNSPRM) will be returned to the local DB2.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 49.

00D35C04

**Explanation:** DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. An invalid instance has been received as a parameter on an ENDBND command.

This reason code is issued by the following CSECT: DSNLZSBD

**System Action:** An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (PRMNSPRM) will be returned to the local DB2.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 49.

00D35C05

**Explanation:** DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. An invalid instance has been received as a parameter on a REBIND command.

This reason code is issued by the following CSECT: DSNLZSBD

**System Action:** An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (PRMNSPRM) will be returned to the local DB2.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 49.
00D35C06

**Explanation:** DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. One or more instance variables, defined by DDM Level 3 as required parameters for this DDM command, were not received.

This reason code is issued by the following CSECT: DSNLZSBD

**System Action:** An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the local DB2.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

At this DB2 remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

00D35C07

**Explanation:** DB2 has detected an error while parsing a DDM command or DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command data received from a local DB2. The DDM command contains an instance variable which is not defined within DDM level 3.0 The instance variable (parameter) is invalid.

This reason code is issued by the following CSECT: DSNLZSBD

**System Action:** An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

A DDM reply message (PRMNSPRM) will be returned to the local DB2.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

At this DB2 remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

00D35C08

**Explanation:** DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. The value of the DDM enumerated scalar, DRPPKG, is invalid.

This reason code is issued by the following CSECT: DSNLZSBD

**System Action:** An alert is generated and message DSNL030I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the local DB2.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL030I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

At this DB2 remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

00D35C09

**Explanation:** DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. Multiple occurrences of a DDM instance variable, defined by DDM Level 3 as nonrepeatable, have been processed as parameters on this DDM command.

This reason code is issued by the following CSECT: DSNLZSBD

**System Action:** An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the local DB2.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

At this DB2 remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.
00D35C0A
Explanation: DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. The value of the DDM enumerated scalar, BNDCRTCTL, is invalid.
This reason code is issued by the following CSECT:
DSNLZSBD
System Action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.
A DDM reply message (VALNSPRM) will be returned to the local DB2.
Operator Response: Notify the system programmer.
System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.
At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 83.
At this DB2 remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 49.

00D35C0B
Explanation: DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. The value of the DDM enumerated scalar, BNDEXPOPT, is invalid.
This reason code is issued by the following CSECT:
DSNLZSBD
System Action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.
A DDM reply message (VALNSPRM) will be returned to the local DB2.
Operator Response: Notify the system programmer.
System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.
At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 83.
At this DB2 remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 49.

00D35C0C
Explanation: DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. The value of the DDM enumerated scalar, BNDSTTASM, is invalid.
This reason code is issued by the following CSECT:
DSNLZSBD
System Action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.
A DDM reply message (VALNSPRM) will be returned to the local DB2.
Operator Response: Notify the system programmer.
System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.
At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 83.
At this DB2 remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 49.

00D35C0D
Explanation: DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. The value of the DDM enumerated scalar, DECPRC, is invalid.
This reason code is issued by the following CSECT:
DSNLZSBD
System Action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.
A DDM reply message (VALNSPRM) will be returned to the local DB2.
Operator Response: Notify the system programmer.
System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.
At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 83.
At this DB2 remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 49.
**00D35C0E**

**Explanation:** DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. Bytes 9 through 18 of the DDM scalar, DFRTRBCOL, are other than blank. While DDM defines the length of DFRTRBCOL to be 18 bytes, DB2 supports only 8-byte collection identifiers.

This reason code is issued by the following CSECT: DSNLZSBD

**System Action:** An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (VALNSPRM) will be returned to the local DB2.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

At this DB2 remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

**00D35C0F**

**Explanation:** DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. The value of the DDM enumerated scalar, PKGDFTCC, is invalid.

This reason code is issued by the following CSECT: DSNLZSBD

**System Action:** An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (VALNSPRM) will be returned to the local DB2.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

At this DB2 remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

**00D35C10**

**Explanation:** DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. The length of the DDM scalar PKGDFTCC is invalid.

This reason code is issued by the following CSECT: DSNLZSBD

**System Action:** An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the local DB2.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

At this DB2 remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

**00D35C11**

**Explanation:** DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. The DDM PKGDFTCC collection consists of three DDM scalars: CCSIDSBC, CCSIDMBC, and CCSIDDBC. The PKGDFTCC collection contains multiple instances of the CCSIDSBC scalar. This is invalid.

This reason code is issued by the following CSECT: DSNLZSBD

**System Action:** An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the local DB2.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

At this DB2 remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.
**00D35C12**

**Explanation:** DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. The DDM PKGDFTCC collection consists of three DDM scalars: CCSIDSBC, CCSIDMBC, and CCSIDDBC. The PKGDFTCC collection contains multiple instances of the CCSIDDBC scalar. This is invalid.

This reason code is issued by the following CSECT: DSNLZSBD

**System Action:** An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the local DB2.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 49.

---

**00D35C14**

**Explanation:** DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. The DDM PKGDFTCC collection consists of three DDM scalars: CCSIDSBC, CCSIDMBC, and CCSIDDBC. The PKGDFTCC collection contains an invalid DDM object.

This reason code is issued by the following CSECT: DSNLZSBD

**System Action:** An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the local DB2.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 49.

---

**00D35C13**

**Explanation:** DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. The DDM PKGDFTCC collection consists of three DDM scalars: CCSIDSBC, CCSIDMBC, and CCSIDDBC. The PKGDFTCC collection contains multiple instances of the CCSIDMBC scalar. This is invalid.

This reason code is issued by the following CSECT: DSNLZSBD

**System Action:** An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the local DB2.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 83.

---

**00D35C15**

**Explanation:** DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. The value of the DDM enumerated scalar, PKGDFTCST, is invalid.

This reason code is issued by the following CSECT: DSNLZSBD

**System Action:** An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (VALNSPRM) will be returned to the local DB2.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 49.
00D35C16

**Explanation:** DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. The value of the DDM enumerated scalar, PKGISOLVL, is invalid.

This reason code is issued by the following CSECT: DSNLZ520BD

**System Action:** An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (VALNSPRM) will be returned to the local DB2.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

At this DB2 remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

00D35C17

**Explanation:** DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. The DDM object PKGNAM is a mapped scalar containing RDBNAM, RDBCOLID and PKGID. Bytes 9 through 18 of the DDM scalar, PKGID, are other than blank. While DDM defines the length of PKGID to be 18 bytes, DB2 supports only 8 byte package identifiers.

This reason code is issued by the following CSECT: DSNLZ520BD

**System Action:** An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (VALNSPRM) will be returned to the local DB2.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

At this DB2 remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

00D35C18

**Explanation:** DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. The DDM object PKGNAMCT is a mapped scalar containing RDBNAM, RDBCOLID, PKGID and PKGCNSTKN. Bytes 17 and 18 of the DDM scalar, PKGID, are other than blank. While DDM defines the length of PKGID to be 18 bytes, DB2 supports only a 16 byte RDBNAM.

This reason code is issued by the following CSECT: DSNLZ520BD

**System Action:** An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (VALNSPRM) will be returned to the local DB2.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

At this DB2 remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.
Appendix B,

At this local DB2, collect the following diagnostic items listed in DS NL032I message should be analyzed.

Problem Determination:
For information on identifying and reporting the problem.

DB2 Diagnosis Guide and Reference
If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

System Programmer Response:
If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

System Programmer Response:
If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

System Programmer Response:
If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

System Programmer Response:
If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

System Programmer Response:
If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

System Programmer Response:
If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

System Programmer Response:
If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

System Programmer Response:
If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
**Explanation:** DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. The value of the RDBNAM scalar is other than the local DB2 RDBNAM.

This reason code is issued by the following CSECT: DSNLZSBD

**System Action:** An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (RDBNACRM) will be returned to the local DB2.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 49.

---

**Explanation:** DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. The value of the DDM enumerated scalar, RDBRLSOPT, is invalid.

This reason code is issued by the following CSECT: DSNLZSBD

**System Action:** An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (VALNSPRM) will be returned to the local DB2.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 49.

---

**Explanation:** DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. The value of the DDM enumerated scalar, STTDATFMT, is invalid.

This reason code is issued by the following CSECT: DSNLZSBD

**System Action:** An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (VALNSPRM) will be returned to the local DB2.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 49.

---

**Explanation:** DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. The value of the DDM enumerated scalar, STTDECDEL, is invalid.

This reason code is issued by the following CSECT: DSNLZSBD

**System Action:** An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (VALNSPRM) will be returned to the local DB2.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 49.
Appendix B,

At this local DB2, collect the following diagnostic items listed in DSNL032I message should be analyzed.

identified by the IFCID sequence number enumerated in the Problem Determination:

for information on identifying and reporting the problem.

A DDM reply message (VALNSPRM) will be returned to the local DB2.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 49.

---

Appendix B,

At this DB2 remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 49.
Appendix B, At this local DB2, collect the following diagnostic items listed in DSNL032I message should be analyzed. Identified by the IFCID sequence number enumerated in the Problem Determination: for information on identifying and reporting the problem.

System Action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the local DB2.

Operator Response: Notify the system programmer.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 49.

Appendix B, At this DB2 remote server, collect the following diagnostic items listed in DSNL032I message should be analyzed. Identified by the IFCID sequence number enumerated in the Problem Determination: for information on identifying and reporting the problem.

System Action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the local DB2.

Operator Response: Notify the system programmer.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 49.

Appendix B, At this local DB2, collect the following diagnostic items listed in DSNL032I message should be analyzed. Identified by the IFCID sequence number enumerated in the Problem Determination: for information on identifying and reporting the problem.

System Action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the local DB2.

Operator Response: Notify the system programmer.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 49.

Appendix B, At this local DB2, collect the following diagnostic items listed in DSNL032I message should be analyzed. Identified by the IFCID sequence number enumerated in the Problem Determination: for information on identifying and reporting the problem.

System Action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the local DB2.

Operator Response: Notify the system programmer.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 49.

Appendix B, At this local DB2, collect the following diagnostic items listed in DSNL032I message should be analyzed. Identified by the IFCID sequence number enumerated in the Problem Determination: for information on identifying and reporting the problem.

System Action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the local DB2.

Operator Response: Notify the system programmer.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 49.
00D35C2A
Explanation: DB2 has detected an error while parsing a DDM BGNBIND, BNDSQLSTT, ENDBIND, DRPPKG, or REBIND command received from the local DB2. The value of MAXSCTNBR received on the ENDBIND command is invalid. The value must be within the range 1 to 32767 inclusive.
This reason code is issued by the following CSECT: DSNLZSBD
System Action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.
A DDM reply message (VALNSPRM) will be returned to the local DB2.
Operator Response: Notify the system programmer.
System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.
Collect the following diagnostic items at this local DB2.
- Statistics class 4 trace record identified by the IFCID sequence number specified in message DSNL031I.
Collect the following diagnostic items at the remote server.
- Relevant error and system logs spanning the time of the failure.
- Any relevant AS trace information or dumps.

00D35C2B
Explanation: DB2 has detected an error while parsing a DDM BGNBIND or REBIND command received from a DRDA requester. The value of the enumerated scalar, PKGATHRUL, is invalid.
System Action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.
A DDM reply message (VALNSPRM) is returned to the DRDA requester.
Operator Response: Notify the system programmer.
Problem Determination: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Analyze the statistics class 4 trace record identified by the IFCID sequence number given in message DSNL032I.
If the DRDA requester is a DB2, then DB2 diagnostic information is available. In that case, at the DB2 requester, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.
At the DB2 server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.
This reason code is issued by the following CSECT: DSNLZSBD

00D35D01
Explanation: DB2 has detected an error while parsing a DDM command received from a local DB2. An instance variable, defined as valid by DDM Level 3, but not supported by DB2, has been detected on one of the following DDM commands: CLSQRY, DSCRLTBL, DSCSQLSTT, or EXCSQLIMM.
This reason code is issued by the following CSECT: DSNLSQL
System Action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.
A DDM reply message (PRMNSPRM) will be returned to the local DB2.
Operator Response: Notify the system programmer.
System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.
At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.
At this DB2 remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

00D35D02
Explanation: DB2 has detected an error while parsing a DDM command received from a local DB2. An instance variable, defined as valid by DDM Level 3, but not supported by DB2, has been detected on a DDM CNTQRY command.
This reason code is issued by the following CSECT: DSNLSQL
System Action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.
A DDM reply message (PRMNSPRM) will be returned to the local DB2.
Operator Response: Notify the system programmer.
Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.
At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.
At this DB2 remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

00D35D03
Explanation: DB2 has detected an error while parsing a DDM command received from a local DB2. The value of the DDM OUTFEXP enumerated value instance variable, contained within a DDM EXCSQLSTT command, is other than FALSE (‘F0’) or TRUE (‘F1’).
This reason code is issued by the following CSECT: DSNLSQL
00D35D04

**Explanation:** DB2 has detected an error while parsing a DDM command received from a local DB2. An instance variable, defined as valid by DDM Level 3, but not supported by DB2, has been detected on a DDM EXCSQLSTT command.

This reason code is issued by the following CSECT: DSNLZSQL

**System Action:** An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (PRMNSPRM) will be returned to the local DB2.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 49.

---

00D35D05

**Explanation:** DB2 has detected an error while parsing a DDM command received from a local DB2. The value of DDM QRYBLKCTL instance variable, received as a parameter on OPNQRY, is other than FRCNSNGROW. The local DB2 may not specify LMTBLKPRC or SNGROWPRC as values of QRYBLKCTL as an OPNQRY parameter.

This reason code is issued by the following CSECT: DSNLZSQL

**System Action:** An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (VALNSPRM) will be returned to the local DB2.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 49.

---

00D35D07

**Explanation:** DB2 has detected an error while parsing a DDM command received from a local DB2. The value of the DDM RTNSQLDA enumerated value instance variable, contained within a DDM EXCSQLSTT command, is other than FALSE (X’F0’) or TRUE (X’F1’).

This reason code is issued by the following CSECT: DSNLZSQL

**System Action:** An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (VALNSPRM) will be returned to the local DB2.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 49.
At this DB2 remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 49.

00D35D09

Explanation: DB2 has detected an error while parsing a DDM command received from a local DB2. An instance variable, defined as valid by DDM Level 3, but not supported by DB2, has been detected on a DDM RDBCCMV or RDBRLLBCV command.

This reason code is issued by the following CSECT: DSNLZSQL

System Action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (PRMNSPRM) will be returned to the local DB2.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 49.

00D35D0A

Explanation: DB2 has detected an error while parsing a DDM command received from a local DB2. The length of the DDM command is not equal to the sum of the lengths of the constituent instance variables.

This reason code is issued by the following CSECT: DSNLZSQL

System Action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the local DB2.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 49.

00D35D0B

Explanation: DB2 has detected an error while parsing a DDM command received from a local DB2. One or more instance variables, defined by DDM Level 3 as required for this command, were not received as command parameters.

This reason code is issued by the following CSECT: DSNLZSQL

System Action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the local DB2.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 49.

00D35D0C

Explanation: DB2 has detected an error while parsing a DDM command received from a local DB2. An instance variable, defined by DDM Level 3 as not valid for this command, has been received as a command parameter.

This reason code is issued by the following CSECT: DSNLZSQL

System Action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (PRMNSPRM) will be returned to the local DB2.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 49.
Explanation: DB2 has detected an error while parsing a DDM command received from a local DB2. Multiple occurrences of one or more instance variables, defined by DDM level 3 as nonrepeatable, have been received as parameters of this DDM command.

This reason code is issued by the following CSECT: DSNLZSQL

System Action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the local DB2.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051, 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051, 1, 49.

Explanation: DB2 has detected an error while parsing a DDM command received from a local DB2. The value of the RDBNAM instance variable is different than that received on the ACCRDB command.

This reason code is issued by the following CSECT: DSNLZSQL

System Action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (RDBNACRM) will be returned to the local DB2.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051, 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051, 1, 49.
00D35D11

Explanation:  DB2 has detected an error while parsing a DDM command received from a local DB2. The mapped scalar, PKGNAMCSN, is invalid. Either bytes 9 through 18 of the package name are other than blank or the section number is nonpositive. While the DDM scalar, PKGID, is defined by DDM level 3 to be 18 bytes in length, DB2 supports only 8 byte package names.

This reason code is issued by the following CSECT: DSNLZSQL

System Action:  An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (VALNSPRM) will be returned to the local DB2.

Operator Response:  Notify the system programmer.

System Programmer Response:  If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination:  The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

At this DB2 remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

00D35D12

Explanation:  DB2 has detected an error while parsing a DDM command received from a local DB2. The value of the DDM scalar, QRYBLKKSZ, contained as a parameter on a DDM OPNQRY, CNTQRY, or EXCSQLSTT command, is invalid. The value of QRYBLKKSZ must be between 512 and 32767, inclusive.

This reason code is issued by the following CSECT: DSNLZSQL

System Action:  An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (VALNSPRM) will be returned to the local DB2.

Operator Response:  Notify the system programmer.

System Programmer Response:  If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination:  The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

At this DB2 remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

00D35D13

Explanation:  DB2 has detected an error while parsing a DDM command received from a local DB2. A TIMESTAMP instance variable has been included as a command parameter received from a database other than DB2. This DDM scalar is private to DB2.

This reason code is issued by the following CSECT: DSNLZSQL

System Action:  An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (PRMNSPRM) will be returned to the local DB2.

Operator Response:  Notify the system programmer.

System Programmer Response:  If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination:  The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

At this DB2 remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.
Appendix B, At this local DB2, collect the following diagnostic items listed in DSNL032I message should be analyzed.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051, 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051, 1, 49.

Appendix B, At this local DB2, collect the following diagnostic items listed in DSNL032I message should be analyzed.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051, 1, 49.

Appendix B, At this DB2 remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051, 1, 49.

Appendix B, At this local DB2, collect the following diagnostic items listed in DSNL032I message should be analyzed.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051, 1, 49.

Appendix B, At this DB2 remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051, 1, 49.
00D35D1A

**Explanation:** DB2, acting as a DRDA server, has detected an error while parsing a DDM DSCSQLSTT command received from a remote DRDA client. The value of the DDM enumerated scalar TYPSQLDA is invalid.

**System Action:** An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

If the remote DRDA client is a DB2 UDB for OS/390 system, at the DB2 DRDA server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

At the DB2 DRDA server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

---

00D35D1B

**Explanation:** DB2, acting as a DRDA server, has detected an error while parsing a DDM OPNQRY or EXCSQLSTT command received from a remote DRDA client. The value of the DDM enumerated scalar OUTOVROPT is invalid.

This reason code is issued by the following CSECT: DSNLZSQL

**System Action:** An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

If the remote DRDA client is a DB2 for MVS system, at the DB2 DRDA server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

At the DB2 DRDA server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

---

00D35D1C

**Explanation:** DB2, acting as a DRDA server, has detected an error while parsing a DDM CNTQRY command received from a remote DRDA client. The value of the DDM enumerated scalar RTNEXTDTA is invalid.

This reason code is issued by the following CSECT: DSNLZSQL

**System Action:** An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

If the remote DRDA client is a DB2 for MVS system, at the DB2 DRDA server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

At the DB2 DRDA server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.
**00D35E00**

**Explanation:** DB2 has detected an error while parsing a DDM command or DDM command data. An invalid RDBNAM length was sent on an ACCSEC command.

This reason code is issued by the following CSECT: DSNLZSAS

**System Action:** If the length of the RDBNAM is greater than 18, then a DDM reply message (SYNTAXRM) is returned to the DRDA client. If the data in characters 17-18 of the RDBNAME is non-blank, then a DDM reply message (VALNSPRM) is returned to the DRDA client.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix B. “Problem determination” on page 1051

At this remote server, collect the following diagnostic items listed in Appendix B. “Problem determination” on page 1051

---

**00D35E01**

**Explanation:** DB2 has detected an error while parsing a DDM command or DDM command data. An ACCSEC or SECCHK command was sent without one or more of its required DDM instance variables.

This reason code is issued by the following CSECT: DSNLZSAS.

**System Action:** A DDM reply message (SYNTAXRM) is returned to the local DB2.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix B. “Problem determination” on page 1051

At this remote server, collect the following diagnostic items listed in Appendix B. “Problem determination” on page 1051

---

**00D35E02**

**Explanation:** DB2 has detected an error while parsing a DDM command or DDM command data. An ACCSEC or SECCHK command was sent with the RQSDSS length fields set improperly.

This reason code is issued by the following CSECT: DSNLZSAS.

**System Action:** A DDM reply message (SYNTAXRM) is returned to the local DB2.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix B. “Problem determination” on page 1051

At this remote server, collect the following diagnostic items listed in Appendix B. “Problem determination” on page 1051

---

**00D35E03**

**Explanation:** DB2 has detected an error while parsing a DDM command or DDM command data. An invalid instance variable was sent on an ACCSEC command.

This reason code is issued by the following CSECT: DSNLZSAS.

**System Action:** A DDM reply message (SYNTAXRM) is returned to the local DB2.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix B. “Problem determination” on page 1051

At this remote server, collect the following diagnostic items listed in Appendix B. “Problem determination” on page 1051

---

**00D35E04**

**Explanation:** DB2 has detected an error while parsing a DDM command or DDM command data. A duplicate instance variable was sent on an ACCSEC command.

This reason code is issued by the following CSECT: DSNLZSAS.

**System Action:** A DDM reply message (SYNTAXRM) is returned to the local DB2.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix B. “Problem determination” on page 1051

At this remote server, collect the following diagnostic items listed in Appendix B. “Problem determination” on page 1051
00D35E05

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. An invalid SECMGRNM length was sent on an ACCSEC command. The SECMGRNM must be null.

This reason code is issued by the following CSECT: DSNLZSAS.

System Action: A DDM reply message (SYNTAXRM) is returned to the local DB2.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix B, "Problem determination" on page 1051 83.

At this remote server, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 49.

00D35E06

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. An invalid SECMEC length was sent on an ACCSEC command. Only one SECMEC can be specified.

This reason code is issued by the following CSECT: DSNLZSAS.

System Action: A DDM reply message (SYNTAXRM) is returned to the local DB2.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix B, "Problem determination" on page 1051 83.

At this remote server, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 49.

00D35E08

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. A duplicate instance variable was sent on a SECCHK command.

This reason code is issued by the following CSECT: DSNLZSAS.

System Action: A DDM reply message (SYNTAXRM) is returned to the local DB2.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix B, "Problem determination" on page 1051 83.

At this remote server, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 49.

00D35E09

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. An invalid SECMGRNM length was sent on a SECCHK command. The SECMGRNM must be null.

This reason code is issued by the following CSECT: DSNLZSAS.

System Action: A DDM reply message (SYNTAXRM) is returned to the local DB2.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix B, "Problem determination" on page 1051 83.

At this remote server, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 49.
00D35E0A

**Explanation:** DB2 has detected an error while parsing a DDM command or DDM command data. An invalid SECMEC length was sent on a SECCHK command. Only one SECMEC can be specified.

This reason code is issued by the following CSECT: DSNLZSAS.

**System Action:** A DDM reply message (SYNTAXRM) is returned to the local DB2.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix B, “Problem determination” on page 1051.

At this remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

00D35E0B

**Explanation:** DB2 has detected an error while parsing a DDM command or DDM command data. An invalid RDBNAM length was sent on a SECCHK command.

This reason code is issued by the following CSECT: DSNLZSAS.

**System Action:** A DDM reply message (SYNTAXRM) is returned to the DRDA client.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix B, “Problem determination” on page 1051.

At this remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

00D35E0C

**Explanation:** DB2 has detected an error while parsing a DDM command or DDM command data. An invalid USRID length was sent on a SECCHK command. DB2 userids cannot exceed 8 bytes.

This reason code is issued by the following CSECT: DSNLZSAS.

**System Action:** A DDM reply message (SYNTAXRM) is returned to the local DB2.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

At this remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

00D35E0D

**Explanation:** DB2 has detected an error while parsing a DDM command or DDM command data. An invalid PASSWRD length was sent on a SECCHK command. DB2 passwords cannot exceed 8 bytes.

This reason code is issued by the following CSECT: DSNLZSAS.

**System Action:** A DDM reply message (SYNTAXRM) is returned to the local DB2.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix B, “Problem determination” on page 1051.

At this remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

00D35E0E

**Explanation:** DB2 has detected an error while parsing a DDM command data object or DDM reply data object received from the remote server as part of a DDM command or reply. The sum of the lengths of the constituent DDM objects within an OBJDSS is inconsistent with the length of the DSS carrier.

This reason code is issued by the following CSECT: DSNLZODM.

**System Action:** An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

At this remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.
**00D35E0F**

**Explanation:** DB2 has detected an error in the DDM command data object or DDM reply data object received from the remote server as part of a DDM command or reply. The size of the object is greater than 32KB and the DDM level 6b extended length field is invalid.

This reason code is issued by the following CSECT: DSNLZODM

**System Action:** An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051.

At this remote server, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 49.

**00D35E10**

**Explanation:** DB2, acting as a DRDA client, has detected a floating point conversion error when converting a nullable 4-byte or 8-byte floating point number in IEEE format to System/370 format.

This reason code is issued by the following CSECT: DSNLZFEX

**System Action:** An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

**Operator Response:** Notify the system programmer.

**User Response:** Check the floating point value. Overflow can occur when the floating value is out of the System/370 floating point range. Refer to Appendix A of DB2 SQL Reference for details of floating point range.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At the DB2 for MVS DRDA client, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051.

**00D35E11**

**Explanation:** DB2, acting as a DRDA client, has detected a floating point conversion error when converting a nullable 4-byte or 8-byte floating point number in IEEE format to System/370 format.

This reason code is issued by the following CSECT: DSNLZFEX

**System Action:** An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

**Operator Response:** Notify the system programmer.

**User Response:** Check the floating point value. Overflow can occur when the floating value is out of the System/370 floating point range. Refer to Appendix A of DB2 SQL Reference for details of floating point range.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At the DB2 for MVS DRDA client, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051.

**00D35E12**

**Explanation:** DB2, acting as a DRDA client, has detected a floating point conversion error when converting a 4-byte floating point number in VAX format to System/370 format.

This reason code is issued by the following CSECT: DSNLZFEX

**System Action:** An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

**Operator Response:** Notify the system programmer.

**User Response:** Check the floating point value. Overflow can occur when the floating value is out of the System/370 floating point range. Refer to Appendix A of DB2 SQL Reference for details of floating point range.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At the DB2 for MVS DRDA client, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051.

**00D35E13**

**Explanation:** DB2, acting as a DRDA client, has detected a floating point conversion error when converting a nullable 4-byte floating point number in VAX format to System/370 format.

This reason code is issued by the following CSECT: DSNLZFEX

**System Action:** An alert is generated and message

---

**00D35E0F**

**Explanation:** DB2 has detected an error in the DDM command data object or DDM reply data object received from the remote server as part of a DDM command or reply. The size of the object is greater than 32KB and the DDM level 6b extended length field is invalid.

This reason code is issued by the following CSECT: DSNLZODM

**System Action:** An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051.

At this remote server, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 49.

**00D35E10**

**Explanation:** DB2, acting as a DRDA client, has detected a floating point conversion error when converting a 4-byte or 8-byte floating point number in IEEE format to System/370 format.

This reason code is issued by the following CSECT: DSNLZFEX

**System Action:** An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

**Operator Response:** Notify the system programmer.

**User Response:** Check the floating point value. Overflow can occur when the floating value is out of the System/370 floating point range. Refer to Appendix A of DB2 SQL Reference for details of floating point range.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At the DB2 for MVS DRDA client, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051.

**00D35E11**

**Explanation:** DB2, acting as a DRDA client, has detected a floating point conversion error when converting a nullable 4-byte or 8-byte floating point number in IEEE format to System/370 format.

This reason code is issued by the following CSECT: DSNLZFEX

**System Action:** An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

**Operator Response:** Notify the system programmer.

**User Response:** Check the floating point value. Overflow can occur when the floating value is out of the System/370 floating point range. Refer to Appendix A of DB2 SQL Reference for details of floating point range.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At the DB2 for MVS DRDA client, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051.

**00D35E12**

**Explanation:** DB2, acting as a DRDA client, has detected a floating point conversion error when converting a 4-byte floating point number in VAX format to System/370 format.

This reason code is issued by the following CSECT: DSNLZFEX

**System Action:** An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

**Operator Response:** Notify the system programmer.

**User Response:** Check the floating point value. Overflow can occur when the floating value is out of the System/370 floating point range. Refer to Appendix A of DB2 SQL Reference for details of floating point range.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At the DB2 for MVS DRDA client, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051.

**00D35E13**

**Explanation:** DB2, acting as a DRDA client, has detected a floating point conversion error when converting a nullable 4-byte floating point number in VAX format to System/370 format.

This reason code is issued by the following CSECT: DSNLZFEX

**System Action:** An alert is generated and message
DSNL031I is written to the console. Refer to the description of this message for further information.

**Operator Response:** Notify the system programmer.

**User Response:** Check the floating point value. Overflow can occur when the floating value is out of the System/370 floating point range. Refer to Appendix A of *DB2 SQL Reference* for details of floating point range.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At the DB2 for MVS DRDA client, collect the following diagnostic items listed in *Appendix B, “Problem determination” on page 1051*: 83.

---

**00D35E14**

**Explanation:** DB2, acting as a DRDA client, has detected a floating point conversion error when converting a 8-byte floating point number in VAX format to System/370 format. This reason code is issued by the following CSECT: DSNLZFEX

**System Action:** An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

**Operator Response:** Notify the system programmer.

**User Response:** Check the floating point value. Overflow can occur when the floating value is out of the System/370 floating point range. Refer to Appendix A of *DB2 SQL Reference* for details of floating point range.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At the DB2 for MVS DRDA client, collect the following diagnostic items listed in *Appendix B, “Problem determination” on page 1051*: 83.

---

**00D35E15**

**Explanation:** DB2, acting as a DRDA client, has detected a floating point conversion error when converting a nullable 8-byte floating point number in VAX format to System/370 format. This reason code is issued by the following CSECT: DSNLZFEX

**System Action:** An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

**Operator Response:** Notify the system programmer.

**User Response:** Check the floating point value. Overflow can occur when the floating value is out of the System/370 floating point range. Refer to Appendix A of *DB2 SQL Reference* for details of floating point range.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At the DB2 for MVS DRDA client, collect the following diagnostic items listed in *Appendix B, “Problem determination” on page 1051*: 83.

---

**00D35E16**

**Explanation:** DB2, acting as a DRDA client, has detected a floating point conversion error when converting a 4-byte floating point number in 80x86 format to System/370 format. This reason code is issued by the following CSECT: DSNLZFEX

**System Action:** An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

**Operator Response:** Notify the system programmer.

**User Response:** Check the floating point value. Overflow can occur when the floating value is out of the System/370 floating point range. Refer to Appendix A of *DB2 SQL Reference* for details of floating point range.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At the DB2 for MVS DRDA client, collect the following diagnostic items listed in *Appendix B, “Problem determination” on page 1051*: 83.
**00D35E18**

**Explanation:** DB2, acting as a DRDA client, has detected a floating point conversion error when converting a 8-byte floating point number in 80x86 format to System/370 format. This reason code is issued by the following CSECT: DSNLZFEX

**System Action:** An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

**Operator Response:** Notify the system programmer.

**User Response:** Check the floating point value. Overflow can occur when the floating value is out of the System/370 floating point range. Refer to Appendix A of DB2 SQL Reference for details of floating point range.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At the DB2 for MVS DRDA client, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

---

**00D35E19**

**Explanation:** DB2, acting as a DRDA client, has detected a floating point conversion error when converting a nullable 8-byte floating point number in 80x86 format to System/370 format. This reason code is issued by the following CSECT: DSNLZFEX

**System Action:** An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

**Operator Response:** Notify the system programmer.

**User Response:** Check the floating point value. Overflow can occur when the floating value is out of the System/370 floating point range. Refer to Appendix A of DB2 SQL Reference for details of floating point range.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At the DB2 for MVS DRDA client, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

---

**00D35E1C**

**Explanation:** DB2, acting as a DRDA client, has detected an error in a nullable NUL-terminated string of length less than 257 bytes. The NUL-terminator cannot be located within the data field as defined by the DDM descriptor received. This reason code is issued by the following CSECT: DSNLZFEX

**System Action:** An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At the DB2 for MVS DRDA client, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

---

**00D35E1A**

**Explanation:** DB2, acting as a DRDA client, has detected an error in a NUL-terminated string of length less than 257 bytes. The NUL-terminator cannot be located within the data field as defined by the DDM descriptor received.

This reason code is issued by the following CSECT: DSNLZFEX

**System Action:** An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At the DB2 for MVS DRDA client, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.
00D35E1D

Explanation: DB2, acting as a DRDA client, has detected an error in a nullable NUL-terminated string of length greater than 256 bytes. The NUL-terminator cannot be located within the data field as defined by the DDM descriptor received.

This reason code is issued by the following CSECT: DSNLZFEX

System Action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At the DB2 for MVS DRDA client, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

00D35E1E

Explanation: DB2, acting as a DRDA client, has detected an error in a numeric character data field (nullable or non-nul-lable). DB2 has detected a numeric conversion error, preventing the data from being converted to packed decimal format.

This reason code is issued by the following CSECT: DSNLZFEX

System Action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

Operator Response: Notify the system programmer.

User Response: Check the numeric data.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At the DB2 for MVS DRDA client, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

00D35E20

Explanation: DB2, acting as a DRDA client, has detected an error in a variable length DBCS character data field whose length is given by a 2-byte length field and whose maximum length is less than 257 bytes. The value of the length field is either negative or greater than the maximum length specified by the DDM descriptor for the field.

This reason code is issued by the following CSECT: DSNLZFEX

System Action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At the DB2 for MVS DRDA client, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

00D35E21

Explanation: DB2, acting as a DRDA client, has detected an error in a variable length DBCS character data field whose length is given by a 2-byte length field and whose maximum length is greater than 256 bytes. The value of the length field is either negative or greater than the maximum length specified by the DDM descriptor for the field.

This reason code is issued by the following CSECT: DSNLZFEX

System Action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At the DB2 for MVS DRDA client, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.
**00D35E22**

**Explanation:** DB2, acting as a DRDA client, has detected an error in a nullable variable length DBCS character data field whose length is given by a 2-byte length field and whose maximum length is less than 257 bytes. The value of the length field is either negative or greater than the maximum length specified by the DDM descriptor for the field.

This reason code is issued by the following CSECT: DSNLZFEX

**System Action:** An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At the DB2 for MVS DRDA client, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

---

**00D35E23**

**Explanation:** DB2, acting as a DRDA client, has detected an error in a variable length DBCS character data field whose length is given by a 1-byte length field. The value of the length field is greater than the maximum length specified by the DDM descriptor for the field.

This reason code is issued by the following CSECT: DSNLZFEX

**System Action:** An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At the DB2 for MVS DRDA client, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

---

**00D35E24**

**Explanation:** DB2, acting as a DRDA client, has detected an error in a variable length DBCS character data field whose length is given by a 1-byte length field. The value of the length field is greater than the maximum length specified by the DDM descriptor for the field.

This reason code is issued by the following CSECT: DSNLZFEX

**System Action:** An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At the DB2 for MVS DRDA client, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

---

**00D35E25**

**Explanation:** DB2, acting as a DRDA client, has detected an error in a variable length SBCS character data field whose length is given by a 2-byte length field and whose maximum length is less than 257 bytes. The value of the length field is either negative or greater than the maximum length specified by the DDM descriptor for the field.

This reason code is issued by the following CSECT: DSNLZFEX

**System Action:** An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At the DB2 for MVS DRDA client, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

---

**00D35E26**

**Explanation:** DB2, acting as a DRDA client, has detected an error in a variable length SBCS character data field whose length is given by a 2-byte length field and whose maximum length is less than 257 bytes. The value of the length field is either negative or greater than the maximum length specified by the DDM descriptor for the field.

This reason code is issued by the following CSECT: DSNLZFEX

**System Action:** An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At the DB2 for MVS DRDA client, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.
00D35E27

Explanation: DB2, acting as a DRDA client, has detected an error in a variable length SBCS character data field whose length is given by a 2-byte length field and whose maximum length is greater than 256 bytes. The value of the length field is either negative or greater than the maximum length specified by the DDM descriptor for the field.

This reason code is issued by the following CSECT: DSNLZFEX

System Action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At the DB2 for MVS DRDA client, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

00D35E28

Explanation: DB2, acting as a DRDA client, has detected an error in a variable length SBCS character data field whose length is given by a 2-byte length field and whose maximum length is greater than 256 bytes. The value of the length field is either negative or greater than the maximum length specified by the DDM descriptor for the field.

This reason code is issued by the following CSECT: DSNLZFEX

System Action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At the DB2 for MVS DRDA client, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

00D35E29

Explanation: DB2, acting as a DRDA client, has detected an error in a variable length SBCS character data field whose length is given by a 2-byte length field and whose maximum length is greater than 256 bytes. The value of the length field is either negative or greater than the maximum length specified by the DDM descriptor for the field.

This reason code is issued by the following CSECT: DSNLZFEX

System Action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At the DB2 for MVS DRDA client, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

00D35E2A

Explanation: DB2, acting as a DRDA server, has detected an error while parsing a DDM BNDOPT command data object received from a remote DRDA client. The BNDOPT collection contains multiple instances of the BNDOPTNM scalar. This is invalid.

This reason code is issued by the following CSECT: DSNLZOBO

System Action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the remote DRDA client.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

If the remote DRDA client is a DB2 for MVS system, at the DB2 DRDA client, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

00D35E2B

Explanation: DB2, acting as a DRDA server, has detected an error while parsing a DDM BNDOPT command data object received from a remote DRDA client. The BNDOPT collection contains multiple instances of the BNDOPTNM scalar. This is invalid.

This reason code is issued by the following CSECT: DSNLZOBO

System Action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the remote DRDA client.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At the DB2 for MVS DRDA client, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

User Response: Check the numeric data.
Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

If the remote DRDA client is a DB2 for MVS system, at the DB2 DRDA client, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051. For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051, 1, 49.

00D35E2C

Explanation: DB2, acting as a DRDA server, has detected an error while parsing a DDM BNDOPT command data object received from a remote DRDA client. The BNDOPT collection contains an invalid instance.

This reason code is issued by the following CSECT: DSNLZBOB

System Action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (PRMNSPRM) will be returned to the remote DRDA client.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

If the remote DRDA client is a DB2 for MVS system, at the DB2 DRDA client, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051. For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051, 1, 49.

00D35E2D

Explanation: DB2, acting as a DRDA server, has detected an error while parsing a DDM BNDOPT command data object received from a remote DRDA client. A BNDOPTNM instance variable is required for this DDM collection but was not received.

This reason code is issued by the following CSECT: DSNLZBOB

System Action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the remote DRDA client.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

If the remote DRDA client is a DB2 for MVS system, at the DB2 DRDA client, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051. For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051, 1, 49.

00D35E2F

Explanation: DB2, acting as a DRDA server, has detected an error while parsing a DDM BNDOPT command data object received from a remote DRDA client. The length of the DDM object is less than 4, the minimum length of any DDM object. This is invalid.

This reason code is issued by the following CSECT: DSNLZBOB

System Action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the remote DRDA client.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

If the remote DRDA client is a DB2 for MVS system, at the DB2 DRDA client, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 83. For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 49.

00D35E30
Explanation: DB2, acting as a DRDA server, has detected an error while parsing a DDM BNDOPT command data object received from a remote DRDA client. The length of the DDM command is less than the sum of the lengths of the constituent instance variables appearing as parameters.

This reason code is issued by the following CSECT: DSNLZOBO

System Action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the remote DRDA client.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

If the remote DRDA client is a DB2 for MVS system, at the DB2 DRDA client, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 83. For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 49.

00D35E31
Explanation: DB2, acting as a DRDA server, has detected an error while parsing a DDM BNDOPT command data object received from a remote DRDA client. The length of a DDM instance variable is less than the minimum length defined by DDM Level 3. This is invalid.

This reason code is issued by the following CSECT: DSNLZOBO

System Action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the remote DRDA client.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

If the remote DRDA client is a DB2 for MVS system, at the DB2 DRDA client, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 83. For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 49.

00D35E32
Explanation: DB2, acting as a DRDA server, has detected an error while parsing a DDM BNDOPT command data object received from a remote DRDA client. The length of a DDM instance variable is greater than the maximum length defined by DDM Level 3. This is invalid.

This reason code is issued by the following CSECT: DSNLZOBO

System Action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the remote DRDA client.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

If the remote DRDA client is a DB2 for MVS system, at the DB2 DRDA client, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 83. For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 49.

00D35E33
Explanation: DB2 has detected an error in the DDM SQLRSRLD reply data object received from the remote server in response to a DDM EXCSQLSTT command that generated query result sets. The value of the single element of the SQLNUMGRP, SQLNUM, defining the total number of SQLRSROW occurrences within the SQLRSRLD array, is inconsistent with the number of result sets indicated in the RSLSETRM.

This reason code is issued by the following CSECT: DSNLZRRS.

System Action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30020 and SQLSTATE 58009.

Operator Response: Notify the system programmer.
**Problem Determination:** Analyze the statistics class 4 trace record identified by the IFCID sequence number given in message DSNL031I.

At the DB2 requester, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051, 1, 83.

If the DRDA server is DB2 for OS/390, then DB2 diagnostic information is available. In this case, at the DB2 server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051, 1.

---

**00D35E34**

**Explanation:** DB2 has detected an error in the DDM SQLRSRLRD reply data object received from the remote server in response to a DDM EXCSQLSTT command that generated query result sets. Within one or more SQLRSROW occurrences, the lengths of SQLRSNAME_m and SQLRSNAME_s are both non-0, but only one of these lengths should be non-0. The data is invalid with regard to the Early SQLRSGRP group descriptor as defined by DRDA.

This reason code is issued by the following CSECT: DSNLZRRS.

**System Action:** An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30020 and SQLSTATE 58009.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

---

**00D35E35**

**Explanation:** DB2 has detected an error in the DDM SQLCINRD reply data object received from the remote server in response to a DDM EXCSQLSTT command that generated query result sets. Within one or more SQLCIROW occurrences, the lengths of SQLCNAME_m and SQLCNAME_s are both non-0, but only one of these lengths should be non-0. The data is invalid with regard to the Early SQLCIGRP group descriptor as defined by DRDA.

This reason code is issued by the following CSECT: DSNLZRCI.

**System Action:** An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30020 and SQLSTATE 58009.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

---

**00D35E37**

**Explanation:** DB2 has detected an error while parsing a DDM command or DDM command data. An invalid IPADDR length was sent on a SYNCLOG object.

This reason code is issued by the following CSECT: DSNLZPSL

**System Action:** A DDM reply message (SYNTAXRM) is returned to the DRDA client.

**Operator Response:** Notify the system programmer.
System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix B, “Problem determination” on page 1051.

At this remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

00D35E38

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. An invalid SNAADDR length was sent on a SYNCLOG object.

This reason code is issued by the following CSECT: DSNLZPSL

System Action: A DDM reply message (SYNTAXRM) is returned to the DRDA client.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix B, “Problem determination” on page 1051.

At this remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

00D35E39

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. An invalid RDBNAM length was sent on a SYNCLOG object.

This reason code is issued by the following CSECT: DSNLZPSL

System Action: A DDM reply message (SYNTAXRM) is returned to the DRDA client.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix B, “Problem determination” on page 1051.

At this remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

00D35E3C

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. An invalid instance variable was sent on a SYNCLOG object.

This reason code is issued by the following CSECT: DSNLZPSL

System Action: A DDM reply message (SYNTAXRM) is returned to the DRDA client.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix B, “Problem determination” on page 1051.

At this remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.
Appendix B, "Problem determination" on page 1051

At this local DB2, collect the following diagnostic item listed in Appendix B, "Problem determination" on page 1051 83.

At this remote server, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 49.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix B, "Problem determination" on page 1051 83.

At this remote server, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 49.

**Explanation:** DB2 has detected an error while parsing a DDM command or DDM command data. A duplicate instance variable was sent on a SYNCCTL command.

This reason code is issued by the following CSECT: DSNLZSAS

**System Action:** A DDM reply message (SYNTAXRM) is returned to the DRDA client.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix B, "Problem determination" on page 1051 83.

At this remote server, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 49.

**Explanation:** DB2 has detected an error while parsing a DDM command or DDM command data. An invalid RLSCONV variable was sent on a SYNCCTL command.

This reason code is issued by the following CSECT: DSNLZSAS

**System Action:** A DDM reply message (SYNTAXRM) is returned to the DRDA client.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix B, "Problem determination" on page 1051 83.

At this remote server, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 49.

**Explanation:** DB2 has detected an error while parsing a DDM command or DDM command data. An invalid instance variable was sent on a SYNCCTL command.

This reason code is issued by the following CSECT: DSNLZSAS

**System Action:** A DDM reply message (SYNTAXRM) is returned to the DRDA client.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix B, “Problem determination” on page 1051.

At this remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

---

**00D35E42**

**Explanation:** DB2 has detected an error while parsing a DDM command or DDM command data. An invalid UOWID length was sent on a SYNCRSY command.

This reason code is issued by the following CSECT: DSNLZSAS

**System Action:** A DDM reply message (SYNTAXRM) is returned to the DRDA client.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix B, “Problem determination” on page 1051.

At this remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

---

**00D35E43**

**Explanation:** DB2 has detected an error while parsing a DDM command or DDM command data. An invalid instance variable was sent on a SYNCRSY command.

This reason code is issued by the following CSECT: DSNLZSAS

**System Action:** A DDM reply message (SYNTAXRM) is returned to the DRDA client.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix B, “Problem determination” on page 1051.

At this remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

---

**00D35E44**

**Explanation:** DB2 has detected an error while parsing a DDM command or DDM command data. A duplicate instance variable was sent on a SYNCRSY command.

This reason code is issued by the following CSECT: DSNLZSAS

**System Action:** A DDM reply message (SYNTAXRM) is returned to the DRDA client.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix B, “Problem determination” on page 1051.

At this remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

---

**00D35E45**

**Explanation:** DB2 has detected an error while parsing a DDM command or DDM command data. An invalid RSYNCTYP length was sent on a SYNCRSY command.

This reason code is issued by the following CSECT: DSNLZSAS

**System Action:** A DDM reply message (SYNTAXRM) is returned to the DRDA client.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix B, “Problem determination” on page 1051.

At this remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

---

**00D35E46**

**Explanation:** DB2 has detected an error while parsing a DDM command or DDM command data. An invalid UOWID length was sent on a SYNCRSY command.

This reason code is issued by the following CSECT: DSNLZSAS

**System Action:** A DDM reply message (SYNTAXRM) is returned to the DRDA client.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix B, “Problem determination” on page 1051 83.

At this remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 49.

00D35E47

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. An invalid UOWSTATE length was sent on a SYNCRSY command.

This reason code is issued by the following CSECT: DSNLZSAS

System Action: A DDM reply message (SYNTAXRM) is returned to the DRDA client.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix B, “Problem determination” on page 1051 83.

At this remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 49.

00D35E48

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. An invalid FORGET length was sent on a SYNCCTL command.

This reason code is issued by the following CSECT: DSNLZSAS

System Action: A DDM reply message (SYNTAXRM) is returned to the DRDA client.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix B, “Problem determination” on page 1051 83.

At this remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 49.
Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix B, "Problem determination" on page 1051: 83.

At this remote server, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 49.

### 00D35E51

**Explanation:** DB2, acting as a DRDA server, has detected an error in a DDM command data object received from a remote client. The DDM object is the OUTOVR object. The size of the OUTOVR is greater than 32KB and the DDM level 6b extended length field is invalid.

**System Action:** An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A SYNTAXRM reply message will be returned to the remote DRDA client.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

If the remote DRDA client is a DB2 for MVS system, at the DB2 DRDA client, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 83. For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 49.

### 00D35E52

**Explanation:** DB2, acting as a DRDA server, has detected an error in a DDM command data object received from a remote client. The DDM object is the OUTOVR object. The size of the OUTOVR is greater than 32KB and the DDM level 6b extended length field is invalid.

**System Action:** An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A SYNTAXRM reply message will be returned to the remote DRDA client.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

If the remote DRDA client is a DB2 for MVS system, at the DB2 DRDA client, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 83. For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 49.

### 00D35E53

**Explanation:** DB2, acting as a DRDA server, has detected an error in a DDM command data object received from the remote client. The DDM object is the OUTOVR scalar of the SQLDTARD collection. The FDOCA descriptor geometry is incorrect. The SQLCADATA row triplet (RLO) is either invalid or has not been included within the SQLDTARD descriptor. The descriptor is invalid.

This reason code is issued by the following CSECT: DSNLZSOV

**System Action:** An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DSCINVRM reply message will be returned to the remote DRDA client.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

If the remote DRDA client is a DB2 for MVS system, at the DB2 DRDA client, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 83. For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 49.

### 00D35E54

**Explanation:** DB2, acting as a DRDA server, has detected an error in a DDM command data object received from the remote client. The DDM object is the OUTOVR scalar of the SQLDTARD collection. The FDOCA descriptor geometry is incorrect. Either the first component of the SQLCADATA row is other than an SQLCAGRP (early) group or the number of elements taken from the SQLCAGRP or SQLCAGRP replication factor (or both) are incorrect. The descriptor is invalid.

This reason code is issued by the following CSECT: DSNLZSOV

**System Action:** An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DSCINVRM reply message will be returned to the remote DRDA client.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.
System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

If the remote DRDA client is a DB2 for MVS system, at the DB2 DRDA client, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 83. For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 49.

00D35E55

Explanation: DB2, acting as a DRDA server, has detected an error in a DDM command data object received from the remote client. The DDM object is the OUTOVR scalar of the SQLDTARD collection. The FDOCA descriptor geometry is incorrect. The first component of the SQLCADTA row correctly enumerates the elements of the SQLCAGRP; however, the second component, identifying the SQLDTAGRP (late) group, is incorrect. Either the SQLDTAGRP local identifier (LID) is different from the LID of the SQLDTAGRP previously specified or the number of elements taken from the SQLDTAGRP replication factor (or both) are incorrect. The descriptor is invalid. This reason code is issued by the following CSECT: DSNLZSOV

System Action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DSCINVRM reply message will be returned to the remote DRDA client.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

If the remote DRDA client is a DB2 for MVS system, at the DB2 DRDA client, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 83. For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 49.

00D35E57

Explanation: DB2, acting as a DRDA server, has detected an error in a DDM command data object received from the remote client. The DDM object is the OUTOVR scalar of the SQLDTARD collection. The FDOCA descriptor geometry is incorrect. Either the SQLDTARD is specified as other than a row triplet (RLO) or the SQLDTARD RLO triplet is invalid. The descriptor is invalid. This reason code is issued by the following CSECT: DSNLZSOV

System Action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DSCINVRM reply message will be returned to the remote DRDA client.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

If the remote DRDA client is a DB2 for MVS system, at the DB2 DRDA client, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 83. For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 49.
00D35E58

Explanation: DB2, acting as a DRDA server, has detected an error in a DDM command data object received from the remote client. The DDM object is the OUTOVR scalar of the SQLDTARD collection. The FDOCA descriptor geometry is incorrect. Either the SQLCADTA local identifier (LID) referenced within the SQLDTARD RLO did not match the LID defined within the SQLCADTA RLO or the number of elements or replication factor (or both) within the SQLDTARD RLO was non-zero. The descriptor is invalid.

This reason code is issued by the following CSECT: DSNLZSOV

System Action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DSCINVRM reply message will be returned to the remote DRDA client.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

If the remote DRDA client is a DB2 for MVS system, at the DB2 DRDA client, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051:

- For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051:

- 1, 49.

00D35E59

Explanation: DB2, acting as a DRDA server, has detected an error in a DDM command data object received from the remote client. The DDM object is the OUTOVR scalar of the SQLDTARD collection. The FDOCA descriptor geometry is incorrect. Either the length specified in the LL preceding the OUTOVR is greater than the length of OBJDSS carrier or the length of one of the constituent geometries (triplet lengths) is inconsistent with the length of the OUTOVR. The descriptor is invalid.

This reason code is issued by the following CSECT: DSNLZSOV

System Action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DSCINVRM reply message will be returned to the remote DRDA client.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

If the remote DRDA client is a DB2 for MVS system, at the DB2 DRDA client, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051:

- For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051:

- 1, 49.

00D35E5A

Explanation: DB2 has detected an error while parsing a DDM ACCSEC command or its reply data. The encryption connection key passed in the SECTKN instance variable has an invalid length. The connection key must be a 32-byte security token.

System Action: If at the server, a DDM reply message (SYNTAXRM) is returned to the local DB2.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix B, “Problem determination” on page 1051:

- 83.

At this remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051:

- 1, 49.

00D35E5B

Explanation: DB2 has detected an error while parsing the DDM ACCSEC command or its reply data. The encryption connection key passed in the SECTKN instance variable has an invalid length. The connection key must be a 32-byte security token.

System Action: If at the server, a DDM reply message (SYNTAXRM) is returned to the local DB2.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix B, “Problem determination” on page 1051:

- 83.

At this remote server, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051:

- 1, 49.

00D35E5C

Explanation: DB2 has detected an error while parsing the DDM ACCSEC command or its reply data. The encrypted password passed in the SECTKN instance variable has an invalid length. DB2 supports an 8-byte or a 16-byte encrypted password.

System Action: If at the server, a DDM reply message (SYNTAXRM) is returned to the local DB2.

Operator Response: Notify the system programmer.
**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this remote server, collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051:

1, 49.
X'D4......' Codes

00D40001

Explanation: The IMS attachment facility command module’s ESTAE routine places this reason code in the variable recording area of SYS1.LOGREC. The reason code indicates that the entry is not a standard DB2 entry. The first four characters of the command, the output destination, and the authorization ID for the failing trace entry, the first four characters of the command, the output destination, and the authorization ID are invalid.

This abend reason code is issued by the following CSECTs:

DSNMCMD0 DSNMDRO0 DSNMDR10 DSNMID00

DSNMINIT DSNMDR10 DSNMSN00

System Action: The task is abended.

System Programmer Response: If the abend occurred in an IMS dependent region, restart the region. If the abend occurred in the IMS control region, restart the connection. Determine the failing environment. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Analyze the application’s SQLCA.

Collect the following diagnostic items listed in Appendix B: 

Problem determination on page 1051 4, 26, 27, 45.

00D40008

Explanation: The IMS attachment facility command module’s ESTAE routine places this reason code in the variable recording area of SYS1.LOGREC. The reason code indicates that the entry is not a standard DB2 entry. The first four characters of the command, the output destination, and the authorization ID.

This message records information in the variable recording area (VRA).

This abend reason code is issued by the following CSECT: DSNMCMD0

System Action: Every attempt is made to return to RTM with the retry option. If the retry is successful, a message is sent to the originating destination to show that the command failed.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Analyze the application’s SQLCA.

Collect the following diagnostic items listed in Appendix B: 

Problem determination on page 1051 3, 4, 26, 27, 45.

00D40061

Explanation: The IMS attachment facility command module's application encountered an internal error. To return the proper diagnostic information is available, stop the region with a dump.

This abend reason code is issued by the following CSECT: DSNMID00

System Action: The application’s SQLCA is updated with an SQLCODE -924 and reason code 00D40061. Control is returned to the application.

User Response: Wait for the IMS /START SUBSYS command to be issued before reentering the transaction.

Operator Response: Issue the IMS /START SUBSYS command to establish a connection with DB2 and reenter the transaction.

System Programmer Response: Determine why the IMS /STOP SUBSYS command was issued.

Problem Determination: Analyze the application’s SQLCA.

00D40062

Explanation: The IMS attachment facility could not establish a connection with DB2 because IMS is shutting down.

This abend reason code is issued by the following CSECT: DSNMSN00

System Action: The application’s SQLCA is updated with an SQLCODE -924 and reason code 00D40062. Control is returned to the application.

User Response: Reenter the transaction after IMS has been restarted.

Operator Response: Restart IMS.

System Programmer Response: Determine why IMS was stopped.

Problem Determination: Analyze the application’s SQLCA.

00D40063

Explanation: DB2’s IMS attachment facility received an unexpected return code from the IMS external subsystem attach facility while attempting to start the subsystem connection to DB2.

This abend reason code is issued by the following CSECT: DSNMSN00

System Action: The application’s SQLCA is updated with an SQLCODE -924, reason code 00D40063, and the return code received from the IMS external subsystem facility. One of the following return codes may appear.

- 12 - DB2 connection unsuccessful. The external subsystem encountered an error processing the request.
- 24 - DB2 connection unsuccessful. The external subsystem responded with a "never connect" return code from the initialization exit.
- 28 - DB2 connection unsuccessful. IMS resources were unavailable to process the request.
- 32 - DB2 connection unsuccessful. An invalid EPL was encountered.
- 36 - DB2 connection unsuccessful. Request rejected due to the external subsystem invoking the subsystem termination service exit.

Control is returned to the application.

Operator Response: Notify the system programmer.

System Programmer Response: This is an internal error. To be certain the proper diagnostic information is available, stop the region with a dump.
**Problem Determination:** The WAL control block in the dump contains an IMS attach trace table. Refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in [Appendix B. “Problem determination” on page 1051](#): 4, 5, 26, 27, 45.

---

**00D40069**

**Explanation:** DB2’s IMS attachment facility received an unexpected return code from the IMS external subsystem attach facility while attempting to establish a connection to DB2.

This abend reason code is issued by the following CSECTs:

- DSNMDR10
- DSNMERR0
- DSNMSN00

**System Action:** The application’s SQLCA is updated with an SQLCODE -924, reason code 00D40069, and the return code received from the IMS External Subsystem Attach Facility. Control is returned to the application.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** This is an internal error. To be certain the proper diagnostic information is available, stop the region with a dump.

**Problem Determination:** The WAL control block in the dump contains an IMS attach trace table. Refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in [Appendix B. “Problem determination” on page 1051](#): 4, 5, 26, 27, 45.

---

**00D44021**

**Explanation:** The DB2-DL/I batch support cannot continue because the length of a parameter value specified in the DDITV02 SYSIN data set is incorrect.

This abend reason code is issued by the following CSECT: DSNMTV02

**System Action:** The DB2-DL/I batch support cannot continue and processing is terminated.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Correct the DDITV02 SYSIN data set parameter value in error and rerun the job. Make sure the correct data set name is specified by the DDITV02 DD statement and the DCB RECFM is F or FB for the data set.

If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for more information about failure analysis procedures. For information on identifying and reporting the problem.

**Problem Determination:** The parameter value length limits are the following:

- • DB2 subsystem name: 0 < SSN < 5.
- • LIT value < 5.
- • DB2 initialization module name = 8.
- • DB2 optional resource translation module name < 9.
- • Region error option value < 2.
- • The command recognition value < 2.
- • The connection name < 9.
- • The DB2 plan name < 9.
- • The application program load module name < 9.

Register 8 indicates the delimiter following the field in error.

Collect the following diagnostic items listed in [Appendix B. “Problem determination” on page 1051](#): 1, 4, 32, 54.

---

**00D44022**

**Explanation:** The DB2-DL/I batch support cannot continue because the DDITV02 SYSIN data set cannot be opened or an end of file was reached before a record was read.

This abend reason code is issued by the following CSECT: DSNMTV02

**System Action:** The DB2-DL/I batch support cannot continue and processing is terminated.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Correct the DDITV02 DD statement or data set in error and rerun the job.

If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for more information about identifying and reporting the problem.

**Problem Determination:** See if a DDITV02 data set exists and contains a properly formatted record.

Collect the following diagnostic items listed in [Appendix B. “Problem determination” on page 1051](#): 1, 4, 32, 54.
**00D44023**

**Explanation:** The DB2-DL/I batch support cannot continue because one or more of the DDITV02 SYSIN data set values are incorrectly specified. The end of the input record was detected before all the values were found.

This abend reason code is issued by the following CSECT: DSNMTV02

**System Action:** The DB2-DL/I batch support cannot continue and processing is terminated.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Correct the DDITV02 DD value or data set in error and rerun the job. Make sure the correct data set name is specified by the DDITV02 DD statement and the DCB RECFM is F or FB for the data set.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for more information about identification and reporting the problem.

**Problem Determination:** Check the DDITV02 DD SYSIN values for proper format.

Collect the following diagnostic items listed in Appendix B.

"Problem determination" on page 1051 1, 4, 32, 54.

---

**00D44024**

**Explanation:** The DB2-DL/I batch support cannot continue because the DDITV02 SYSIN data set value for the DB2 initialization module refers to an incorrect module.

This abend reason code is issued by the following CSECT: DSNMTV02

**System Action:** The DB2-DL/I batch support cannot continue and processing is terminated.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Correct the DDITV02 SYSIN DD value or data set in error by specifying DSNMIN10 as the initialization module and rerun the job.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** Check the DDITV02 DD SYSIN value for the required parameter DSNMIN10.

Collect the following diagnostic items listed in Appendix B.

"Problem determination" on page 1051 1, 4, 32, 54.

---

**00D44025**

**Explanation:** The DB2-DL/I batch support cannot continue because the DDITV02 SYSIN data set value for the DB2 region error option is incorrect. Only R, Q, A, or null (specified as „,) are valid.

This abend reason code is issued by the following CSECT: DSNMTV02

**System Action:** The DB2-DL/I batch support cannot continue and processing is terminated.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Correct the DDITV02 SYSIN DD value for the region error option of R, Q, A, or null and rerun the job.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** Check the DDITV02 DD SYSIN value for the proper value of the error option of R, Q, A, or null.

Collect the following diagnostic items listed in Appendix B.

"Problem determination" on page 1051 1, 4, 32, 54.

---

**00D44031**

**Explanation:** The DB2-DL/I batch support cannot continue because a connection could not be established to the DB2 subsystem named in the DDITV02 SYSIN data set. This error usually occurs for one of these reasons:

- The DB2 subsystem name specified either in the DDITV02 SYSIN data set (default) or in the member defined by the IMSID-SSM combination is incorrect.
- The DB2 system is not operational.

This abend reason code is issued by the following CSECT: DSNMTV03

**System Action:** The DB2-DL/I batch support cannot continue and processing is terminated.

**User Response:** Notify the system programmer.

**Operator Response:** It might be necessary to start the DB2 subsystem specified.

**System Programmer Response:** Either correct the DDITV02 DD SYSIN or the member pointed to by the IMSID-SSM combination for the DB2 subsystem name if it is incorrect, and rerun the job. Otherwise, have the operator start the DB2 subsystem if it is stopped.

**Problem Determination:** Either check the DDITV02 DD SYSIN or the member pointed to by the IMSID-SSM combination for the proper DB2 subsystem name. Make sure the correct data set name is specified by the DDITV02 DD statement and the DCB RECFM is F or FB for the data set.

The WAL control block in the dump contains information about the connection and the IMS attach trace table. Field WALSSID indicates the name of the DB2 subsystem being called.

The last entry in the trace table has an ID of ID00 and the CALL STATUS contains the 2-byte return code and 4-byte reason code of the failure. The 4-byte reason code might provide additional diagnostic information to help determine the cause of the failure.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

If the correct DB2 subsystem name was specified and was available, refer to the specific reason code explanation for details about the error.

Collect the following diagnostic items listed in Appendix B.

"Problem determination" on page 1051 1, 4, 32, 54, 55.
**Explanation:** The DB2-DL/I batch support cannot continue because the application was selected as a dead lock victim.

This abend reason code is issued by the following CSECT: DSNMTV03

**System Action:** The DB2-DL/I batch support cannot continue and processing is terminated.

**User Response:** Notify the system programmer.

**Operator Response:** Notify the system programmer.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051, 1, 4, 32, 54, 55.

---

**Explanation:** The DB2-DL/I batch support cannot continue because the authorization ID has been changed by the application program.

This abend reason code is issued by the following CSECT: DSNMTV03

**System Action:** The DB2-DL/I batch support cannot continue and processing is terminated.

**User Response:** Notify the system programmer.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** This is a site problem. A PSB name beginning with SYSAM is being used as the authorization ID.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051, 1, 4, 32, 54, 55.

---

**Explanation:** The DB2-DL/I batch support cannot continue because an unrecoverable error was encountered during resolve indoubt processing between IMS and DB2. The status of the current indoubt DB2 thread remains unchanged.

This abend reason code is issued by the following CSECT: DSNMTV03

**System Action:** The DB2-DL/I batch support processing is terminated, and a DB2 04E SVC dump is requested.

**Operator Response:** Enter the DISPLAY THREAD TYPE (INDOUBT) command to determine the current status of indoubt thread processing between IMS and DB2 at the time of the failure. Notify the system programmer.

**System Programmer Response:** This may be an internal protocol error between the IMS external subsystem attach facility and the DB2 IMS attachment facility, or an execution environment error external to both IMS and DB2. Examine both the IMS and MVS console logs for any error messages or abnormal return codes associated with the DL/I batch job.

**Problem Determination:** Locate and examine any DB2 IMS attachment log records (code X'5501FE') that are present in the IMS log data set, and examine WAL trace table entries included in the dump.

If a DB2 reason code is provided in either the WAL trace entry, or the WALSFER2 field of the X'5501FE' log record, follow the instructions associated with this reason code for additional information concerning the failure.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051, 1, 2, 5, 25, 27. 32. 45. 49. 50.
If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** The authorization ID saved by DB2 does not match the value in ASXBUSER. Control block modification has occurred. Register 3 plus X’34’ is the changed value.

Collect the following diagnostic items listed in *DB2 Diagnosis Guide and Reference* on page 1051:

<table>
<thead>
<tr>
<th>Diagnosis Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>00D44037</td>
<td>Explanation: The DB2-DL/I batch support cannot continue because the stack of save areas has been exhausted. The error can occur when multiple levels of recursion have been invoked. This abend reason code is issued by the following CSECTs: DSNMTV03, DSNMTV04, DSNMTV05.</td>
</tr>
<tr>
<td>System Action:</td>
<td>The DB2-DL/I batch support cannot continue and processing is terminated.</td>
</tr>
<tr>
<td>Operator Response:</td>
<td>Notify the system programmer.</td>
</tr>
<tr>
<td>System Programmer Response:</td>
<td>This might be a multiple recursion problem caused by the execution of a changed data capture exit.</td>
</tr>
<tr>
<td>Problem Determination:</td>
<td>Verify that the user exit(s) are not being recursively invoked during a data base update operation.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Diagnosis Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>00D44038</td>
<td>Explanation: The DB2 IMS Attach facility attempted to notify the IMS subsystem that captured DB2 table data is ready for propagation. However, the IMS exit manager was not available for notification. This abend reason code is issued by the following CSECT: DSNMTV03.</td>
</tr>
<tr>
<td>System Action:</td>
<td>DB2 propagation processing is abnormally terminated.</td>
</tr>
<tr>
<td>User Response:</td>
<td>Notify the system programmer.</td>
</tr>
<tr>
<td>System Programmer Response:</td>
<td>This is a site problem. The required release of IMS is not available.</td>
</tr>
<tr>
<td>Problem Determination:</td>
<td>Verify that the IMS release that supports data propagation from DB2 to IMS is installed.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Diagnosis Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>00D44039</td>
<td>Explanation: The DB2-DL/I batch support cannot continue because the record format (RECFM) for the DDOTV02 output data set has a format of fixed or fixed block.</td>
</tr>
<tr>
<td>System Action:</td>
<td>The DB2-DL/I batch support cannot continue and processing is terminated.</td>
</tr>
<tr>
<td>System Programmer Response:</td>
<td>Change the RECFM parameter in the DCB from fixed ‘F’ or fixed blocked ‘FB’ to variable ‘V’ or variable blocked ‘VB’. Specify LRECL=4092 and a BLKSIZE of at least LRECL+4. Then rerun the job.</td>
</tr>
<tr>
<td>Problem Determination:</td>
<td>Check the DDOTV02 DD for the proper DCB-RECFM value of ‘V’ or ‘VB’.</td>
</tr>
</tbody>
</table>

Collect the following diagnostic items listed in *DB2 Diagnosis Guide and Reference* on page 1051:

<table>
<thead>
<tr>
<th>Diagnosis Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>00D44050</td>
<td>Explanation: The DB2-DL/I batch support cannot continue because a DB2 prepare problem was detected. This abend reason code is issued by the following CSECT: DSNMTV05.</td>
</tr>
<tr>
<td>System Action:</td>
<td>The DB2-DL/I batch support cannot continue and processing is terminated.</td>
</tr>
<tr>
<td>Operator Response:</td>
<td>Notify the system programmer.</td>
</tr>
<tr>
<td>System Programmer Response:</td>
<td>This is an internal error. Refer to Section 3 of <em>DB2 Diagnosis Guide and Reference</em> for information on identifying and reporting the problem.</td>
</tr>
<tr>
<td>Problem Determination:</td>
<td>The WAL control block in the dump contains an IMS attach trace table. The last entry in the trace table will have an ID of PREP. The CALL STATUS contains the two-byte return code and four-byte reason code of the failure.</td>
</tr>
<tr>
<td>Collect the following diagnostic items listed in <em>DB2 Diagnosis Guide and Reference</em> on page 1051: 1, 4, 32, 54, 55.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Diagnosis Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>00D44051</td>
<td>Explanation: The DB2-DL/I batch support cannot continue because a DB2 commit continue problem was detected. This abend reason code is issued by the following CSECT: DSNMTV05.</td>
</tr>
<tr>
<td>System Action:</td>
<td>The DB2-DL/I batch support cannot continue and processing is terminated.</td>
</tr>
<tr>
<td>Operator Response:</td>
<td>Notify the system programmer.</td>
</tr>
<tr>
<td>System Programmer Response:</td>
<td>This is an internal error. Refer to Section 3 of <em>DB2 Diagnosis Guide and Reference</em> for information on identifying and reporting the problem.</td>
</tr>
<tr>
<td>Problem Determination:</td>
<td>The WAL control block in the dump contains an IMS attach trace table. The last entry in the trace table will have an ID of COMC. The CALL STATUS contains the two-byte return code and four-byte reason code of the failure.</td>
</tr>
<tr>
<td>Collect the following diagnostic items listed in <em>DB2 Diagnosis Guide and Reference</em> on page 1051: 1, 4, 32, 54, 55.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Diagnosis Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>00D44052</td>
<td>Explanation: The DB2-DL/I batch support cannot continue because a DB2 abort problem was detected. This abend reason code is issued by the following CSECT: DSNMTV05.</td>
</tr>
<tr>
<td>System Action:</td>
<td>The DB2-DL/I batch support cannot continue and processing is terminated.</td>
</tr>
<tr>
<td>Operator Response:</td>
<td>Notify the system programmer.</td>
</tr>
<tr>
<td>System Programmer Response:</td>
<td>This is an internal error. Refer to Section 3 of <em>DB2 Diagnosis Guide and Reference</em> for information on identifying and reporting the problem.</td>
</tr>
<tr>
<td>Problem Determination:</td>
<td>The WAL control block in the dump contains an IMS attach trace table. The last entry in the trace table will have an ID of ABRT. The CALL STATUS contains the two-byte return code and four-byte reason code of the failure.</td>
</tr>
</tbody>
</table>
Collect the following diagnostic items listed in Appendix B, Problem determination on page 1051: 1, 4, 32, 54, 55.

00D44053

Explanation: The DB2-DL/I batch support cannot continue because a DL/I XRST call problem was detected. An XRST call, if issued, must be issued before any SQL call is issued; only one XRST call should be issued.

This abend reason code is issued by the following CSECT: DSNMTV05

System Action: The DB2-DL/I batch support cannot continue and processing is terminated.

Operator Response: Notify the system programmer.

System Programmer Response: This is probably an application program error. Check the PCB status code for a non-blank value, validate the PCB used for the call, and validate the parameters passed by the call. Correct the application program and resubmit the job.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Follow normal IMS debugging techniques to gather the IMS documentation.

Collect the following diagnostic items listed in Appendix B, Problem determination on page 1051: 1, 4, 32, 54, 55.

00D44054

Explanation: The DB2-DL/I batch support cannot continue because an IMS XRST call problem was detected. An XRST call, if issued, must be issued before any SQL call is issued; only one XRST call should be issued.

This abend reason code is issued by the following CSECT: DSNMTV05

System Action: The DB2-DL/I batch support cannot continue and processing is terminated.

Operator Response: Notify the system programmer.

System Programmer Response: This is probably an application program error. Correct the application program so it will issue the XRST call before any SQL statements are processed. Then resubmit the job. Also make sure only one XRST call is issued by the application program.

Check the DDOTV02 data set to see if an INDOUBT unit of recovery has been erroneously aborted.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Follow normal IMS debugging techniques to gather the DL/I documentation.

Collect the following diagnostic items listed in Appendix B, Problem determination on page 1051: 1, 4, 32, 54, 55.

00D44055

Explanation: The DB2-DL/I batch support cannot continue because an IMS CHKP call problem was detected by IMS.

This abend reason code is issued by the following CSECT: DSNMTV05

System Action: The DB2-DL/I batch support cannot continue and processing is terminated.

Operator Response: Notify the system programmer.

System Programmer Response: This is probably an application program error. Check the PCB status code for a non-blank value, validate the PCB used for the call, and validate the parameters passed by the call. Correct the application program and resubmit the job.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Follow normal IMS debugging techniques to gather the IMS documentation.

Collect the following diagnostic items listed in Appendix B, Problem determination on page 1051: 1, 4, 32, 54, 55.

00D44056

Explanation: The DB2-DL/I batch support cannot continue because an IMS ROLL or ROLB call problem was detected by IMS.

This abend reason code is issued by the following CSECT: DSNMTV05

System Action: The DB2-DL/I batch support cannot continue and processing is terminated.

Operator Response: Notify the system programmer.

System Programmer Response: This is probably an application program error. Check the PCB status code for a non-blank value, validate the PCB used for the call, and validate the parameters passed by the call. Correct the application program and resubmit the job.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Follow normal IMS debugging techniques to gather the IMS documentation.

Collect the following diagnostic items listed in Appendix B, Problem determination on page 1051: 1, 4, 32, 54, 55.

00D44057

Explanation: The DB2-DL/I batch support cannot continue because an IMS call problem was detected by the DB2-DL/I batch support. An IMS SYNC, ROLS, or SETS call is not allowed.

This abend reason code is issued by the following CSECT: DSNMTV05

System Action: The DB2-DL/I batch support cannot continue and processing is terminated.

Operator Response: Notify the system programmer.

System Programmer Response: This is probably an application program error. Correct the application program to use supported IMS calls and resubmit the job.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Follow normal IMS debugging techniques to gather the IMS documentation.

Collect the following diagnostic items listed in Appendix B, Problem determination on page 1051: 1, 4, 32, 54, 55.
The requested operation is not performed. An SQLCODE -904 is issued. Message DSNT5001 or message DSNT5011 may also be issued. For more information, refer to Section 2, SQL Return Codes on page 17 or to the description of the DSNT5001 and DSNT5011 messages in Section 2. SQL Return Codes on page 17.

Collect the following diagnostic items listed in Appendix B, Problem determination on page 1051: 1, 3, 5.
**00D60C02**

**Explanation:** Auxiliary index entry not found. An attempt was made to access an auxiliary index, but the entry was missing. This could be caused by not recovering all the table spaces in the table space set to the same point in time. This reason code is issued by the following CSECTs: ??

**System Action:** The operation is not allowed.

**System Programmer Response:** Use the CHECK DATA to determine the rows of the table which are inconsistent. Use SQL UPDATE or DELETE to correct these errors.

If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** The requested operation is not performed.

Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051: 1, 3, 5.

---

**00D60C03**

**Explanation:** Unable to access a LOB data page because it is not formatted or it belongs to another LOB. This reason code is issued by the following CSECTs: ??

**System Action:** The operation is not allowed.

**System Programmer Response:** Run CHECK LOB to determine the extent of the inconsistency.

If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** The requested operation is not performed.

Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051: 1, 3, 5.
X'D7......' Codes

00D70001

Explanation: Either the data space manager (DSM) subcomponent of DB2 could not access some storage group definition, or the storage group contains no volume IDs. Possible sources of the error include use of an incorrect name for the storage group and removal of all volume IDs via ALTER STOGROUP without providing new ones.

This reason code is issued by the following CSECT: DSNPGSGI

System Action: A 'resource not available' code is returned to the caller.

User Response: If you are unable to resolve the problem yourself, notify the system programmer or database administrator.

System Programmer Response: Notify the database administrator if appropriate. Otherwise, check the SQLCA for the name of the storage group. Check this storage group (via an SQL SELECT on SYSIBM.SYSSTOGROUP) to ensure that it exists. Check for associated SYSIBM.SYSVOLUMES table entries to see if any volume IDs exist for this storage group. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Obtain output listing from SELECT * FROM SYSIBM.SYSTOGROUP and SELECT * FROM SYSIBM.SYSVOLUMES; details of the request that resulted in this code, and contents of the SQLCA. Also obtain operator's console sheet showing related messages, if any. Use this documentation to determine the cause of the problem.

Collect the following diagnostic items listed in Appendix B, Problem determination on page 1051: 1, 2, 14, 15, 32, 35.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

This reason code is issued by the following CSECTs:

DSNPCLO0 DSNPSCTC DSNPSCTD DSNPSCT0

00D70002

Explanation: The required data sets are not available to DB2. This is probably a user error. For example, the user might have forgotten to create the needed VSAM data clusters using access method services before issuing a CREATE TABLESPACE request with the USING VCAT parameter.

System Action: A 'resource not available' code is returned to the end user.

User Response: If you are unable to resolve the problem, notify the system programmer or database administrator.

System Programmer Response: Take one or both of these actions:

- Make the needed data set available.
- Be sure it is cataloged in the appropriate integrated catalog facility (ICF) catalog.

The data set names appear in the SQLCA, in the DSNP-prefixed message that contained this code, or in an earlier DSNP-prefixed message for the same user (same connection and correlation IDs).

If the data set name is correct, is cataloged, and appears in the VTOC, run the access method services DIAGNOSE command on the integrated catalog facility (ICF) catalog identified by the first qualifier of the data set name. The DIAGNOSE command is described in DFSMS/MVS: Access Method Services for the Integrated Catalog.

Problem Determination: Collect the following diagnostic items listed in Appendix B, Problem determination on page 1051: 1, 2, 14, 15, 32, 35.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

This reason code is issued by the following CSECTs:

DSNPCLO0

00D70003

Explanation: Some or all of the data sets already exist. The data space manager (DSM) subcomponent of DB2 has discovered the preexistence of a data set having the same name as one it was about to create. The name of the data set appears in the SQLCA and/or in message DSNP002I (DEFINE FAILED FOR data-set-name) or DSNP023I (RENAMENew DATASET SHOULD NOT EXIST FOR data-set-name). If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem. Refer to Section 2 (Volume 1) of DB2 Administration Guide for data set naming conventions.

This may occur if a user creates a data set with VSAM access method services (intending to use it for a table space or index), then creates the table space or index via SQL CREATE statement, but forgets to specify USING VCAT.

Another possibility is that the data set remained from some prior, unsuccessfully completed DROP or DELETEor backout operation of DB2. This failure would probably occur if the data set or integrated catalog facility (ICF) catalog were unavailable at the time of the DROP or DELETEor backout. For example, packs may be offline, or other operational problems may exist. In this case, the table space would be dropped, but the data sets could remain and be brought back online at a later time.

There should have been some indication of this type of failure at the time it occurred. (For example, some DSNP-prefixed message indicating the data set was not deleted). You might check recent console sheets for such a message; however, it may have happened a long time ago.

This reason code is issued by the following CSECTs: DSNPDFN1 DSNPRNMO

System Action: Error indication is returned to the end user.

User Response: If you are unable to resolve the problem yourself, notify the system programmer or database administrator.
System Programmer Response: Notify the database administrator if appropriate. Otherwise, either use access method services to delete the data set or use a different name for the table or index you are trying to create.

If the data set name is correct, is cataloged, and appears in the VTOC, run the access method services DIAGNOSE command against the integrated catalog facility (ICF) catalog identified by the first qualifier of the data set name. The DIAGNOSE command is described in DFSMS/MVS: Access Method Services for the Integrated Catalog.

Problem Determination: Information is needed concerning the history of the use of this data set; that is, of the table space/index name in conjunction with this database name. Listings of the console, integrated catalog facility (ICF) catalog, and VTOC may also be needed, with details of the request that resulted in this code, and contents of the SQLCA. Also obtain operator's console sheet showing related messages, if any. Use this documentation to determine the cause of the problem.

Collect the following diagnostic items listed in Appendix B.

Problem determination

"Problem determination" on page 1051 1, 2, 3, 10, 12, 14, 15, 32, 35.

00D70004

Explanation: Certain data set(s) are pending deletion. Creation of a new data set is blocked by the presence of the name on a drop list. This is usually a user error. It usually occurs when the user has dropped an old object (table space, index, and so forth) and then attempted to redefine it without committing the drop.

This reason code is issued by the following CSECTs: DSNPCPS0, DSNPDFN1

System Action: Error indication is returned to the user.

User Response: You must commit the drop prior to redefining. Notify the system programmer or database administrator, if necessary.

System Programmer Response: The user must commit the drop of the data set on the drop list. Collect the materials listed in the Problem Determination section of this message to determine the specific cause of the problem.

Problem Determination: Documentation is needed showing activities from the last committed action up to including details of the request that resulted in this code. You also need to examine the contents of the SQLCA. Also obtain operator’s console sheet showing related messages, if any. Use this documentation to determine the cause of the problem. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B.

"Problem determination" on page 1051 1, 2, 10, 12, 14, 15, 32, 35.

00D70005

Explanation: The specified data set was access method services user-defined. It does not have the required DB2 attributes.

System Action: No action is taken with the named data set. An error code is returned and a dump is not taken.

Operator Response: Notify the system programmer.

System Programmer Response: Delete the named data set and define it with the correct attributes. Refer to Section 2 of DB2 Installation Guide for the correct data set definition attributes.

Problem Determination: Obtain an access method services LISTCAT for the named data set's attributes.

This reason code is issued by the following CSECTs: DSNPSCTC DSNPSCT0

00D70006

Explanation: The data sets are not owned by this DB2 subsystem. The data sets backing a table space or index can be deleted only by the data space manager (DSM) subcomponent of the DB2 subsystem that created them or by one having the same authorization ID at the time of installation. This is a safety feature to restrict DSM from deleting data sets that might have been created by the user but that have a name that matches the one we are trying to delete. This safety feature also prevents the deletion of data sets that might have been created by some other DB2 subsystem and that are still needed there.

This reason code is issued by the following CSECTs: DSNPDLT1 DSNPDLTE

System Action: The data sets remain intact.

User Response: If you are unable to resolve the problem yourself, notify the system programmer or database administrator.

System Programmer Response: Notify the database administrator if appropriate. Otherwise, check the name of the data sets in question. Delete those names, then issue appropriate DROP and DELETE requests on the DB2 subsystem that created them (see the ‘OWNER’ parameter in the integrated catalog facility (ICF) catalog entry for the data set), or issue access method services DELETE CLUSTER statements directly.

Problem Determination: Obtain integrated catalog facility (ICF) catalog and VTOC listings, details of the request that resulted in this code, and contents of the SQLCA. Also obtain operator’s console sheet showing related messages, if any. This documentation will assist you in determining the cause of the problem.

Collect the following diagnostic items listed in Appendix B.

"Problem determination" on page 1051 1, 2, 10, 12, 14, 15, 32, 35.

00D70007

Explanation: The specified data set must be cataloged in an ICF catalog. It was found in a non-ICF catalog.

This reason code is issued by the following CSECTs: DSNPSCT0 DSNPSCTC DSNPSCTE

System Action: No action is taken with the named data set. An error code is returned and a dump is not taken.

Operator Response: Notify the system programmer.

System Programmer Response: Delete the named data set and re-DEFINE using an ICF catalog.

Problem Determination: Obtain an access method series LISTCAT for the named data set's catalog types. Refer to Section 2 of DB2 Installation Guide for the correct catalog usage.
00D70008

**Explanation:** During allocation, DB2 detects that the attributes for the data set were incorrect. This data set requires the extended addressability attribute defined through DFSMS.

**System Action:** Error indication is returned to the end user and a dump is not taken.

**User Response:** Notify the system programmer or storage administrator.

**System Programmer Response:** To be larger than 4 GB, this data set must belong to a DFSMS data class that is defined with the extended addressability attribute. Specify EXT in the DATA SET NAME TYPE field of the DATA SET CLASS DEFINE panel of DFSMS and make sure the automatic class selection routine associates this data set with this data class.

**Problem Determination:** Obtain the data set attribute information from the corresponding SMS data class for the named data set.

00D70010

**Explanation:** This is an internal error. An attempt to extend a data set failed because a problem was detected in the DSM notify process.

**System Action:** The data sharing extend is incomplete.

**Operator Response:** Notify the system programmer or database administrator.

**System Programmer Response:** For additional information, see the description of message DSNP021I.

**Problem Determination:** Obtain the console sheet showing the associated DSNP021I message and any related messages preceding that message.

Refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

This reason code is issued by the following CSECTs: DSNPXTN0 DSNPNUX1 DSNPNUX2

00D70011

**Explanation:** The data space manager (DSM) subcomponent of DB2 has been requested to extend a table space or index space, but the table space or index space has already been extended to its maximum size. The size of a partition depends on the number of partitions, and can be 1, 2, or 4GB. If the table space or index space is not partitioned, the maximum size is 64GB (32 data sets—‘pieces’—of 2 GB each). The maximum size for an NPI for a large partitioned table space is 512GB (128 data sets of 4GB each). For the name of the data set from which the name of the table space, index space, and/or partition can be derived, see message DSNP001I or DSNP007I and/or the SQLCA. Refer to Section 2 (Volume 1) of *DB2 Administration Guide* for data set naming conventions.

This reason code is issued by the following CSECT: DSNPXTN0

**System Action:** No extension is done. Whatever operation was in progress is terminated and uncommitted activities are backed out.

User Response: If you are unable to resolve the problem yourself, notify the system programmer or database administrator.

System Programmer Response: Notify the database administrator if appropriate. Otherwise, if the table space is partitioned and there is space in other partitions, you may be able to redefine the table space with new partitioning parameters so that the data that has overloaded this partition is directed to others. If the table space is not partitioned, you probably have more than one table residing in this table space. Define another table space, unload this one, then reload the tables into the separate spaces. (Be aware that this is a very large amount of data to move. Careful planning is recommended.)

Problem Determination: If you believe the table space or index space has not yet reached maximum size, provide listings of the console, integrated catalog facility (ICF) catalog, and VTOC. If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051:

1, 2, 10, 12, 14, 15, 32, 35.

00D70012

**Explanation:** A password or security error has occurred. An attempt to access a integrated catalog facility (ICF) catalog entry for a cluster (data set) failed because of some security violation. This is probably a user error. It may be caused either by the incorrect specification of a password or the changing of the password in the DB2 catalog (via SQL ALTER) but not in the integrated catalog facility (ICF) catalog (via access method services ALTER) or vice versa.

This reason code is issued by the following CSECTs:

DSNPAVLR DSNPSCTD DSNPSCT0

**System Action:** A ‘resource not available’ code is returned to the end user.

**User Response:** Ensure that the correct password is being used. If you are unable to resolve the problem yourself, notify the database administrator.

**System Programmer Response:** Notify the database administrator if appropriate. Otherwise, check the passwords and/or RACF authorizations.

**Problem Determination:** Obtain output from SQL SELECT * FROM SYSIBM.SYSTABLESPACE and (if storage group related) SELECT * FROM SYSIBM.SYSTSTGROUP. Also obtain integrated catalog facility (ICF) catalog listing, details of the request that resulted in this code, and contents of the SQLCA. Also obtain operator’s console sheet showing relevant messages, if any. This documentation will assist you in determining the cause of the problem if it is not merely an incorrect password. If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051:

1, 2, 10, 14, 15, 32, 35.
00D70013

Explanation: A required integrated catalog facility (ICF) catalog does not exist or is inaccessible. An attempt to access an integrated catalog facility (ICF) catalog entry for a cluster (data set) failed. This is probably a user error.

System Action: A `resource not available` code is returned to the end user.

User Response: If you are unable to resolve the problem, notify the system programmer or database administrator.

System Programmer Response: Do the following:
- Check that the proper catalog name was specified and is available to DB2.
- Check the associated DSNP012I message on the operator’s console for the integrated catalog facility (ICF) return and reason codes.
- See the description of DSNP012I.
- Look for any related messages on the console sheet.
- Refer to the appropriate MVS publication for a description of message IDC3009I.

Problem Determination: Obtain the following to help you determine the cause of the problem:
- Details of the request that resulted in this code
- Contents of the SQLCA

Collect the following diagnostic items listed in Appendix B.

This reason code is issued by the following CSECTs:
- DSNPLT1
- DSNPLTE
- DSNPSCTC
- DSNPSCTD
- DSNPSCT0

00D70014

Explanation: An attempt to extend a data set failed, because a problem was detected in media manager services.

This reason code is issued by the following CSECT: DSNPXTN0

System Action: Abort the request.

User Response: Notify the operator, system programmer, or database administrator.

Operator Response: Notify the system programmer or database administrator.

System Programmer Response: Notify the database administrator (DBA), if appropriate. The DBA should be made aware of the extend problem. However, this is probably a system problem.

Problem Determination: Obtain console sheet showing associated DSNP001I, DSN007I, or DSNP011I messages and any related messages preceding them. This documentation will assist you in determining the cause of the problem. For additional information, see the description of these messages.

Collect the following diagnostic items listed in Appendix B.

This reason code is issued by the following CSECTs:
- DSNPNUX1
- DSNPNUX2

00D70015

Explanation: An attempt to update the high-used RBA for a data set failed in media manager services.

This reason code is issued by the following CSECTs:
- DSNPPNP
- DSNPRSP0
- DSNPSST0
- DSNPXTN0

System Action: Abort the request.

Operator Response: Notify the system programmer or database administrator.

System Programmer Response: Notify the database administrator (DBA), if appropriate. The DBA should be made aware of the extend problem. However, this is probably a system problem.

Problem Determination: Obtain console sheet showing associated DSNP001I, DSN007I, or DSNP011I messages and any related messages preceding them. This documentation will assist you in determining the cause of the problem. For additional information, see the description of these messages.

Collect the following diagnostic items listed in Appendix B.

This reason code is issued by the following CSECTs:
- DSNPNUX1
- DSNPNUX2

00D70016

Explanation: This is an internal error. An attempt to extend a data set failed because a problem was detected in the DSM notify process.

System Action: The data sharing extend is incomplete.

Operator Response: Notify the system programmer or database administrator.

System Programmer Response: For additional information, see the description of message DSNP021I.

Problem Determination: Obtain console sheet showing associated DSNP001I, DSN007I, or DSNP011I messages and any related messages preceding that message.

Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

This reason code is issued by the following CSECTs:
- DSNPNUX1
- DSNPNUX2

00D70017

Explanation: An error occurred while attempting to obtain information from an integrated catalog facility (ICF) catalog.

System Action: The request is terminated.

System Programmer Response: Ensure that the proper packs and catalog are online and operating correctly. See message DSNP012I.

Problem Determination: Collect the following diagnostic items listed in Appendix B.

This reason code is issued by the following CSECTs:
- DSNPAVL
- DSNPCLO0
- DSNPSCTC
- DSNPSCTD
- DSNPSCT0
00D70018

Explanation: This is a DB2 internal error. One of the following circumstances has occurred:

- A data set inquiry function was called for a partitioned table space or index space. Its function applies only to nonpartitioned table spaces or index spaces.
- The reset function of data space manager (DSM) was called on a table space that had been opened incorrectly.

This reason code is issued by the following CSECTs: DSNPGNP0, DSNPRST0

System Action: Abort the request.

System Programmer Response: Notify the system programmer.

Problem Determination: Request a dynamic dump. In the dump, the second parameter passed to the data set inquiry function identifies the table space or index space. The third parameter is the table space or index space object descriptor block (OBD). The OBD indicates whether or not the table space or index space is partitioned. If it is partitioned, the calling module is in error. If it is not partitioned, the test in the data set inquiry function must be at fault.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 10, 14, 15, 32, 35.

00D70019

Explanation: The data space manager (DSM) subcomponent of DB2 could not release the extend lock it acquired against a data set during an attempt to extend that data set.

This reason code is issued by the following CSECT: DSNPXTN0

System Action: The SQL request that led to the abend is terminated, and the unit of recovery that issued the request is backed out.

Operator Response: Notify the system programmer.

System Programmer Response: Investigate the DSM messages associated with this condition (at least message DSNP015I) for clues to the problem. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: This problem is probably the result of either: (1) an attempt by DSM to free a lock it did not hold or, (2) a problem in IRLM. The IRLM return and reason codes appear in the associated DSNP015I message. For additional information, see the description of this message.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 3, 4, 5, 10, 14, 32, 35.

00D70020

Explanation: This is probably an internal error. An attempt to extend a data set failed because a problem was detected in media manager services during the DSM notify process.

System Action: The request is terminated.

Operator Response: Notify the system programmer or database administrator.

System Programmer Response: For additional information, see the description of message DSNP021I.

Problem Determination: Obtain the console sheet showing the associated DSNP021I message and any related messages preceding that message.

Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

This reason code is issued by the following CSECT: DSNPNUX1

00D70021

Explanation: The data space manager (DSM) subcomponent of DB2 could not write a required log record.

This reason code is issued by the following CSECT: DSNPDFN1

System Action: Abort the request.

Operator Response: Notify the system programmer.

System Programmer Response: Collect the materials listed in the Problem Determination section of this message. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 14, 32, 33, 35.

00D70022

Explanation: The data space manager subcomponent of DB2 is unable to acquire a needed lock. The extend request cannot be completed.

This reason code is issued by the following CSECT: DSNPXTN0

System Action: Abort the request.

Operator Response: Notify the system programmer.

System Programmer Response: Obtain documentation from message DSNP014I. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: See message DSNP014I.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 14, 32, 35.
00D70023

Explanation: There is an insufficient amount of space in primary allocation to format control pages.

This reason code is issued by the following CSECTs: DSNPIPP

System Action: The requested table space or index space creation is backed out.

Operator Response: Notify the system programmer or database administrator.

System Programmer Response: Notify the database administrator if appropriate. Otherwise, increase the primary allocation value in the data set that was defined directly via access method services. (This should not happen for storage group related data sets, because the DB2 interpreter ensures a sufficient setting for the primary value.)

Problem Determination: Obtain the integrated catalog facility (ICF) catalog and VTOC listings, details of the request that led to this code, and contents of the SQLCA. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem. Results of SQL SELECT * FROM SYSIBM.SYSTABLESPACE may also be useful. Also obtain the operator's console sheet showing related messages, if any.

Collect the following diagnostic items listed in Appendix B.

"Problem determination" on page 1051 1, 2, 10, 12, 14, 32, 35.

00D70024

Explanation: No data sets exist for a nonpartitioned table space or index space. Because at least one existed at create time, a serious problem might have occurred for this table space or index space. The name of the data set that DB2 expected to find for the table space or index space appears in message DSNP012I and/or in the SQLCA along with the reason code.

System Action: The request is terminated.

System Programmer Response: Ensure that the data set and its pack are available to DB2 and that the data set has not been inadvertently deleted or migrated by any DASD operation.

If the data set name is correct, is cataloged, and appears in the VTOC, run the access method services DIAGNOSE command on the integrated catalog facility (ICF) catalog identified by the first qualifier of the data set name. The DIAGNOSE command is described in DFSMS/MVS: Access Method Services for the Integrated Catalog.

Problem Determination: Obtain the following:

- The integrated catalog facility (ICF) catalog
- The VTOC listings
- Details of the request that led to this code
- Contents of the SQLCA
- The operator's console sheet showing related messages

Collect the following diagnostic items listed in Appendix B.

"Problem determination" on page 1051 1, 2, 10, 12, 14, 32, 35.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

This reason code is issued by the following CSECTs: DSNPCPN0 DSNPGNP0

00D70025

Explanation: An access method services request failed.

This reason code is issued by the following CSECT: DSNPAMS1

System Action: Abort the request.

Operator Response: Notify the system programmer or database administrator.

System Programmer Response: Examine messages DSNP009I and DSNP010I on the operator's console for the access method services messages they encompass. Refer to the appropriate MVS publication for information about specific access method services messages received.

Problem Determination: See the message DSNP009I description.

Collect the following diagnostic items listed in Appendix B.

"Problem determination" on page 1051 1, 2, 10, 12, 14, 32, 35.

00D70026

Explanation: This is an internal error. An attempt to extend a data set failed because a problem was detected in the DSM notify process.

System Action: The data sharing extend did not complete.

Operator Response: Notify the system programmer or database administrator.

System Programmer Response: For additional information, see the description of message DSNP022I.

Problem Determination: Obtain the console sheet showing the associated DSNP022I message and any related messages preceding that message.

Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

This reason code is issued by the following CSECT: DSNPXTN0

00D70027

Explanation: The secondary allocation value is 0. No physical extension is done. If this occurs in a create of a segment table, the primary allocation of the table space is not big enough to allocate the first segment. The first segment consists of a number of pages which are defined in SEGSIZE.

This reason code is issued by the following CSECT: DSNPXTN0

System Action: The request to extend the data set is terminated.

System Programmer Response: Notify the database administrator if appropriate. Otherwise, if you intended to allow physical extension of the data set, change its secondary value to a nonzero quantity.

Problem Determination: Obtain the integrated catalog facility (ICF) catalog and VTOC listings, and (if storage group-defined) the output from SELECT * FROM SYSIBM.SYSTSTOGROUP. Also obtain details of the request that resulted in this code,
Problem Determination: Refer to the problem determination section(s) of the associated DB2 and HSM messages which were issued to the MVS operator's console.

Operator Response: If processing was terminated, notify the system programmer or database administrator.

System Programmer Response: If processing was terminated, investigate the reason for the HSM failure via messages issued to the MVS operator's console. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Refer to the problem determination section(s) of the associated DB2 and HSM messages which were issued to the MVS operator's console.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 2, 10, 12, 14, 15, 32, 35.

00D70028

Explanation: An HSM request for the recall of a migrated data set failed.

This abend reason code is issued by the following CSECT: DSNPHRC0

System Action: The HSM recall is aborted by data space manager and control returns to the function that issued the recall request. The higher level function will not necessarily terminate processing since the data set may have already been recalled.

Operator Response: If processing was terminated, notify the system programmer or database administrator.

System Programmer Response: If processing was terminated, investigate the reason for the HSM failure via messages issued to the MVS operator's console. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Refer to the problem determination section(s) of the associated DB2 and HSM messages which were issued to the MVS operator's console.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 2, 10, 12, 14, 15, 32, 35.

00D70030

Explanation: Unexpected reason code was received from some DB2 subcomponent invoked by data space manager (DSM).

Almost any DSNP module can issue this reason code.

System Action: Abort the request.

Operator Response: Notify the system programmer.

System Programmer Response: There is not much the system programmer can do here, but see register 2 in the accompanying dump for the unexpected code. Its description may provide a clue to the type of problem. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Obtain a listing of the SQL request that resulted in this code and a listing of the contents of the SQLCA. Also obtain operator's console sheet showing related messages, if any. There should be at least one DSNP-prefixed message containing the '00D70030' code. Messages preceding it from other subcomponents (having other prefixes beginning with DSN) may provide additional details about the problem.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 2, 14, 32, 35.

00D70040

Explanation: An attempt to rename an existing data set failed, because a name does not conform to the naming convention.

This reason code is issued by the following CSECTs: DSNPRNM0 DSNPDLTE

System Action: Error indication is returned to the end user.

User Response: Notify the system programmer.

System Programmer Response: Notify the database administrator if appropriate.

Problem Determination: This problem probably arises during execution of the REORG utility with SHRLEVEL REFERENCE or CHANGE. See message DSNP027I or DSNP026I.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 10, 12, 14, 15, 32, 35.

00D70041

Explanation: An attempt to rename an existing data set failed.

This reason code is issued by the following CSECT: DSNPRNM0

System Action: Error indication is returned to the end user.

User Response: Notify the system programmer.

System Programmer Response: Notify the database administrator if appropriate.

Problem Determination: This problem probably arises during execution of the REORG utility with SHRLEVEL REFERENCE or CHANGE. See message DSNP027I.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 10, 12, 14, 15, 32, 35.

00D70042

Explanation: An attempt to rename an existing data set failed, because the old and new names are not compatible. This problem might arise in one or both of the following situations:

1. One data set name is a DB2 page set data set name and another data set name is a non-DB2 page set data set name.

2. Both are DB2 page set data set names, but there is a mismatch in the catalog alias names, the database names, or the table space/index space names.

This reason code is issued by the following CSECT: DSNPRNM0

System Action: Error indication is returned to the end user.

User Response: Notify the system programmer or database administrator.

System Programmer Response: Notify the database administrator if appropriate.

Problem Determination: This problem probably arises during execution of the REORG utility with SHRLEVEL REFERENCE or CHANGE. See message DSNP027I.
00D70043
Explanation: During the define cluster for an undefined data set, DB2 detected that the specified data set requested to be defined already exists.
System Action: A 'resource not available' code is returned to the end user.
User Response: Delete the existing cluster and rerun the job.

00D70051
Explanation: One of the following is issued on a ROSHARE OWNER database:
- A CREATE TABLESPACE statement
- A CREATE INDEX statement, or
- The REORG utility with SHRLEVEL REFERENCE or SHRLEVEL CHANGE using user-managed data sets

However, the data sets are not defined with VSAM SHAREOPTIONS(1,3).
System Action: An SQLCODE -731 is returned to the end user for (CREATE TABLESPACE or INDEX) The CREATE TABLESPACE or INDEX statement or the REORG utility is not executed.
User Response: Use AMS ALTER SHAREOPTIONS to alter the data set to SHAREOPTIONS(1,3) and resubmit the CREATE TABLESPACE or INDEX statement or the REORG utility.

00D70052
Explanation: An ALTER DATABASE statement is issued to convert a database to ROSHARE OWNER. But, within this database, at least one user defined data set is not defined with VSAM SHAREOPTIONS(1,3). All user-defined data sets that are within this database must be converted to SHAREOPTIONS(1,3) before the database can be altered to ROSHARE OWNER.

This reason code is issued by the following CSECT: DSNPATS0
System Action: An SQLCODE -731 is returned to the end user and the ALTER DATABASE statement is not performed.
User Response: Use AMS ALTER SHAREOPTIONS to alter all user-defined data sets that are within this database to SHAREOPTIONS(1,3), and resubmit the ALTER DATABASE statement.

00D70100
Explanation: A requested resource is not available. Either the data space manager (DSM) or some subcomponent that it invoked discovered that some resource is not available. The name and type of the resource and the reason it is unavailable are placed in the CT control block by the subcomponent that made the discovery. This information is made available to the end user in the SQLCA and/or messages. The reason code in the CT/SQCA contains the identifier of the subcomponent that discovered the problem.

Almost any DSNP module can issue this reason code.
System Action: Abort the current request.
Operator Response: Notify the system programmer or database administrator.
System Programmer Response: Notify the database administrator if appropriate. Otherwise, determine what resource was unavailable (from SQLCA information) and, if it is something you can control, make it available. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Problem Determination: See the Problem Determination section in the description of the code that appears in the SQLCA or CTRURES N field of the CT and/or the description of any associated console messages. Obtain details of the request that resulted in this code, and contents of the SQLCA. Also obtain operator's console sheet showing related messages, if any.
Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 14, 32, 35.

00D79999
Explanation: A severe error has occurred. For example, an invalid data space manager (DSM) function is invoked.
Almost any data space manager (DSM) function can issue this reason code.
System Action: Abort the request.
Operator Response: Notify the system programmer.
System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Problem Determination: Obtain the console sheet, dump, details of the request that led to this code, and contents of the SQLCA. Use these in conjunction with the procedures in Section 3 of DB2 Diagnosis Guide and Reference.
Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 14, 32, 35.
X'D9.....' Codes

00D90000
Explanation: A recovery manager module received control from its FRR for retry and found an invalid retry point identifier. The name of the module in which the failure occurred appears in the SYS1.LOGREC entry showing this reason code in register 15.
System Action: Standard DB2 diagnostic information is provided. The error is recorded in SYS1.LOGREC, an SVC dump is scheduled, and DB2 subsystem termination is requested. The subsystem termination reason code reflects the function for which retry was unsuccessfully attempted.
Operator Response: Print SYS1.LOGREC, and restart DB2.
System Programmer Response: This is a secondary subsystem error. Obtain a copy of SYS1.LOGREC and the SVC dump for this failure and for the original failure that resulted in the retry attempt.
Problem Determination: Examine the SYS1.LOGREC information and the dumps from both the original failure and this second failure to determine if the recovery parameter area was damaged or if retry incorrectly restored registers for the mainline module.

00D90003
Explanation: A failure occurred while DB2 was attempting to open an object in the shared communications area (SCA).
System Action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested before DB2 subsystem termination is initiated.
Operator Response: Ensure the coupling facility for the SCA is available, and restart DB2.
Problem Determination: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Collect the following diagnostic items listed in Appendix B "Problem determination" on page 1051
This abend reason code is issued by the following CSECT: DSNRIT03

00D90004
Explanation: An error occurred while DB2 was attempting to create a service task.
System Action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested before DB2 subsystem termination is initiated.
Problem Determination: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Collect the following diagnostic items listed in Appendix B "Problem determination" on page 1051
This abend reason code is issued by the following CSECT: DSNRIT03

00D90010
Explanation: During the process of re-enabling data sharing, all members, other than the surviving member, are forced to cold start. In the process of setting up the cold start for this member, an active conditional restart control record was discovered in the BSDS. This record could not have been in the BSDS when data sharing was disabled, and this DB2 should have been inactive since data sharing was disabled; therefore, it is unclear what the conditional restart control record is requesting.
System Action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested before DB2 subsystem termination is initiated.
System Programmer Response: Use the change log inventory (DSNU003) utility to cancel the active conditional restart control record in this member's BSDS.
Problem Determination: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Collect the following diagnostic items listed in Appendix B "Problem determination" on page 1051
This abend reason code is issued by the following CSECT: DSNRRGRI

00D90011
Explanation: DB2 determined that the version of the shared communications area (SCA) recorded within the SCA did not match the version of the SCA returned from MVS.
System Action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested before DB2 subsystem termination is initiated.
Problem Determination: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Collect the following diagnostic items listed in Appendix B "Problem determination" on page 1051
This abend reason code is issued by the following CSECT: DSNRRGRI

00D90012
Explanation: An error occurred while DB2 was attempting to create a service task.
System Action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested before DB2 subsystem termination is initiated.
Problem Determination: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Collect the following diagnostic items listed in Appendix B "Problem determination" on page 1051
This abend reason code is issued by the following CSECT: DSNRRGRI
00D90013

Explanation: The restart parameters for TRKRSITE are invalid. If TRKRSITE is YES on DSNZPARM and this DB2 subsystem has not successfully restarted in this 'Tracker Recovery cycle', DB2 requires special conditions before it can restart.

System Action: DB2 startup terminates.

Operator Response: Collect the SYS1.LOGREC and SVC dump, and contact the system programmer.

Problem Determination: Ensure that the Conditional Restart Control Record is correct, then restart DB2. You can run the Print Log Map Utility (DSNJU004) to examine the current Conditional Restart record. The following conditions are correct:
- BACKOUT = NO
- FORWARD = NO
- Either an ENDRBA value for non-data sharing or an ENDLRSN value for data sharing. In data sharing, the ENDLRSN value must be the same for all members restarting in this 'Tracker Recovery cycle'.

To avoid a cold start or log skipping in a tracker site, ensure that STARTTRBA has no specified value. You can create or modify the Conditional Restart parameters with the Change Log Inventory Utility (DSNJU003). See DB2 Utility Guide and Reference for more information on these utilities.

00D9001F

Explanation: An invalid function code was passed to a DB2 service task.

System Action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested before DB2 subsystem termination is initiated.

Problem Determination: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B, on page 1051. This abend reason code is issued by the following CSECT: DSNRRSBS

00D90020

Explanation: During the process of re-enabling data sharing, the surviving member of the previous data sharing disable must be the first member started. An attempt was made to start a member other than the surviving member during the process of re-enabling data sharing.

System Action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested before DB2 subsystem termination is initiated.

Operator Response: To initiate the data sharing re-enable process, start the surviving member of the previous data sharing disable first.

Problem Determination: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B, on page 1051. This abend reason code is issued by the following CSECT: DSNRRGRT

00D90021

Explanation: After data sharing is disabled, only the surviving member of the group can be started. An attempt was made to start a member other than the surviving member.

System Action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested before DB2 subsystem termination is initiated.

Problem Determination: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B, on page 1051. This abend reason code is issued by the following CSECT: DSNRRSBS

00D90022

Explanation: After reading information from the BSDS of a peer member in its data sharing group, this DB2 was not able to close the peer’s BSDS.

System Action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested before DB2 subsystem termination is initiated.

Problem Determination: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B, on page 1051. This abend reason code is issued by the following CSECTs: DSNRRGRC, DSNRRINI, DSNRRSBS

00D90050

Explanation: Data sharing re-enable is cancelled. This DB2 member was cancelled while waiting for other members of the data sharing group to complete their re-enable processing.

System Action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested before DB2 subsystem termination is initiated.

Operator Response: To re-enable data sharing, start the surviving member again.

Problem Determination: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B, on page 1051. This abend reason code is issued by the following CSECT: DSNRRGRT
00D900E0
Explanation: A DB2 functional recovery routine invoked DB2 subsystem termination because an unrecoverable error was detected.
System Action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested before DB2 subsystem termination is initiated.
Problem Determination: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051 1, 2, 5.
This abend reason code is issued by the following CSECT: DSNRRGRC

00D900E1
Explanation: The operator replied 'NO' to message DSNR020L. See message DSNR020L for more information.
System Action: DB2 terminates.
Problem Determination: This abend reason code is issued by the following CSECT: DSNRNTFY

00D900EB
Explanation: This abend reason code appears at a member, other than the surviving member, when the surviving member is not able to complete the process of re-enabling data sharing. This member cannot continue because data sharing was not re-enabled successfully.
System Action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested before DB2 subsystem termination is initiated.
Problem Determination: Determine why the surviving member was not able to complete the data sharing re-enable.
If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051 1, 2, 5.
This abend reason code is issued by the following CSECT: DSNRCRPR

00D900EC
Explanation: During the process of re-enabling data sharing, a member other than the surviving member was not able to complete its portion of the re-enabling process.
System Action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested before DB2 subsystem termination is initiated.
Problem Determination: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051 1, 2, 5.

00D900F1
Explanation: DB2 received an error while attempting to read shared communications area (SCA) information from the coupling facility.
System Action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested before DB2 subsystem termination is initiated.
System Programmer Response: Correct the problem with the coupling facility, and restart DB2.
Problem Determination: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051 1, 2, 5.
This abend reason code is issued by the following CSECTs: DSNRCRPR, DSNRIT02, DSNRIT03, DSNRNTFY, DSNRGRC, DSNRRGRH, DSNRRGRI, DSNRRGRT, DSNRRSBS, DSNRSCA

00D900F2
Explanation: DB2 received an error while attempting to write shared communications area (SCA) information to the coupling facility.
System Action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested before DB2 subsystem termination is initiated.
System Programmer Response: Correct the problem with the coupling facility, and restart DB2.
Problem Determination: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051 1, 2, 5.
This abend reason code is issued by the following CSECTs: DSNRIT02, DSNRIT03, DSNRGRC, DSNRRGRH, DSNRRGRI, DSNRRGRT, DSNRRSBS, DSNRSCA

00D900F3
Explanation: DB2 received an error while attempting to read the BSDS.
System Action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested before DB2 subsystem termination is initiated.
System Programmer Response: Correct the problem with the BSDS, and restart DB2.
Problem Determination: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051 16, 1, 2, 5.
This abend reason code is issued by the following CSECTs: DSNRRGRI, DSNRRINI, DSNRSCA
**00D900F4**

**Explanation:** DB2 received an error while attempting to write to the BSDS.

**System Action:** Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested before DB2 subsystem termination is initiated.

**System Programmer Response:** Correct the problem with the BSDS, and restart DB2.

**Problem Determination:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 16, 1, 2, 5.

This abend reason code is issued by the following CSECTs: DSNRNTFY, DSNRRGRT, DSNRSCA

---

**00D900F8**

**Explanation:** DB2 received an error while attempting to release a lock used to serialize portions of restart or group restart.

**System Action:** Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested before DB2 subsystem termination is initiated.

**Problem Determination:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 5.

This abend reason code is issued by the following CSECTs: DSNRIT02, DSNRIT03, DSNRRGRC, DSNRRGRH, DSNRRGRI, DSNRRGRT, DSNRRSBS, DSNRSCA

---

**00D900F9**

**Explanation:** DB2 received an error while attempting to notify other members in the data sharing group of a restart or group restart event.

**System Action:** Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested before DB2 subsystem termination is initiated.

**Problem Determination:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 5.

This abend reason code is issued by the following CSECTs: DSNRRCRP, DSNRRGRI, DSNRRGRT

---

**00D900FA**

**Explanation:** The starting DB2 subsystem is an incompatible release of DB2 or the code does not have the proper level of SPE applied.

**System Action:** The restart processing will abend, which will terminate the subsystem. No dumps will be taken.

**System Programmer Response:** Verify that:

- The correct load libraries are being used to start up the DB2 subsystem.
- The correct level of SPE has been applied.

Stop the DB2 subsystems that are running with a replaceable release.

This abend reason code is issued by the following CSECTs: DSNRRPRC, DSNRRSBS

---

**00D90100**

**Explanation:** A DB2 functional recovery routine invoked DB2 subsystem termination because an unrecoverable error was detected.

**System Action:** Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested before DB2 subsystem termination is initiated.

**Problem Determination:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the original problem.
Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051.

This abend reason code is issued by the following CSECT: DSNRTIMR

00D90110
Explanation: This is an internal error.
System Action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested before DB2 subsystem termination is initiated.
Problem Determination: Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051.

This abend reason code is issued by the following CSECT: DSNRNTFY

00D90111
Explanation: This is an internal error.
System Action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested before DB2 subsystem termination is initiated.
Problem Determination: Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051.

This abend reason code is issued by the following CSECT: DSNRNTFY

00D92001
Explanation: The checkpoint/restart serial controller (DSNRCSHT) FRR invoked DB2 subsystem termination, because an unrecoverable error was detected while processing a request.

This is a DB2 subsystem termination reason code. For further information, see "IRLM Abend Reason Codes" on page 1037.

This reason code is issued by the following CSECT: DSNRCSHT

System Action: Subsystem termination is initiated. Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested for the associated abend.
Operator Response: Print SYS1.LOGREC, and restart DB2.
System Programmer Response: Obtain a copy of SYS1.LOGREC and the SVC dump for the original error.
Problem Determination: See the original error.

00D92004
Explanation: The checkpoint/restart serial controller (DSNRCSHT) FRR invoked DB2 subsystem termination, because an unrecoverable error was detected while processing a shutdown checkpoint request.

This is a DB2 subsystem termination reason code. For further information, see "IRLM Abend Reason Codes" on page 1037.

This reason code is issued by the following CSECT: DSNRCSHT

System Action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested for the original error before DB2 subsystem termination is initiated.
Operator Response: Print SYS1.LOGREC, and restart DB2.
System Programmer Response: Obtain a copy of SYS1.LOGREC and the SVC dump for the original error.
Problem Determination: See the original error.

00D92011
Explanation: An invalid URE was found during checkpoint processing. An overlay of the URE may have occurred.

This abend reason code is issued by the following CSECT: DSNRPBCW

System Action: The checkpoint process will ABEND to prevent a damaged URE from being written out to the log, and the system will be terminated. This is to prevent the loss or incorrect processing of a DB2 unit of recovery (UR). DB2 Restart will use the previous checkpoint and apply all the DB2 log records up to the point of failure. Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is scheduled.
Operator Response: Collect the SYS1.LOGREC and SVC DUMP, and notify the system programmer. Restart DB2.
System Programmer Response: Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Problem Determination: Examine the SVCDUMP and the DB2 Trace Table in the dump to determine the cause of the URE overlay.

00D92012

Explanation: An invalid RURE was found during checkpoint processing. An overlay of the RURE may have occurred.

This abend reason code is issued by the following CSECT: DSNRPRBCW

System Action: The checkpoint process will abend to prevent a damaged RURE from being written out to the log, and the subsystem will be terminated. This is to prevent the loss or incorrect processing of a DB2 unit of recovery. DB2 Restart will use the previous checkpoint and apply all the DB2 log records up to the point of failure. Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is scheduled.

Operator Response: Collect the SYS1.LOGREC and SVCDUMP, and notify the system programmer. Restart DB2.

System Programmer Response: Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 3, 5.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Examine the SVCDUMP and the DB2 Trace Table in the dump to determine the cause of the RURE overlay.

00D92013

Explanation: An invalid GXID was found during checkpoint processing. An overlay of the GXID might have occurred.

System Action: The checkpoint process will abnormally terminate to prevent a damaged GXID from being written out to the log, and the subsystem will be terminated. This is to prevent the loss of or incorrect processing of a DB2 unit of recovery. DB2 Restart will use the previous checkpoint and apply all the DB2 log records up to the point of failure. Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is scheduled.

Operator Response: Collect the SYS1.LOGREC and SVCDUMP, and notify the system programmer. Restart DB2.

System Programmer Response: Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 3, 5.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Examine the SVCDUMP and the DB2 Trace Table in the dump to determine the cause of the GXID overlay.

00D92021

Explanation: An invalid URE was read from the log during the current status rebuild phase of restart. Restart cannot process the damaged URE.

This abend reason code is issued by the following CSECT: DSNRPLCS

System Action: The restart processing abends, which terminates the subsystem. This is to prevent the loss or incorrect processing of a DB2 unit of recovery.

Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is scheduled. The first 4 digits of the RBA of the invalid log record is contained in register 3 and the last 8 digits in register 4.

Operator Response: Do not attempt to restart DB2 until the error is resolved. Notify the system programmer and collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 3, 5.

System Programmer Response: Print the BSDS using the print log map (DSNJU004) utility. Find the checkpoint queue in the output listing from DSNJU004.

Next, run the change log inventory (DSNJU003) utility to create a conditional restart record with the CHKPTRBA option specifying the Begin checkpoint RBA found in the second entry of the checkpoint queue. Restart DB2 using the conditional restart record found. If the same failure occurs, repeat the conditional process using the next begin checkpoint RBA in the checkpoint queue.

Repeat this process, going down the checkpoint queue until DB2 restarts. This will be prior to the time when the invalid URE was written to the log. The restart process is then able to apply all the log records to the end of the log. For information on running DSNJU004 and DSNJU003, see DB2 Utility Guide and Reference.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

00D92022

Explanation: An invalid RURE was read from the log during the current status rebuild phase of restart. Restart cannot process the damaged RURE.

This abend reason code is issued by the following CSECT: DSNRPLCS

System Action: The restart processing abends, which will terminate the subsystem. This is to prevent the loss or incorrect processing of a DB2 unit of recovery.

Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is scheduled. The first 4 digits of the RBA of the invalid log record is contained in register 3 and the last 8 digits in register 4.

Operator Response: Do not attempt to restart DB2 until the error is resolved. Notify the system programmer and collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 3, 5.

System Programmer Response: Print the BSDS using the print log map (DSNJU004) utility. Find the checkpoint queue in the output listing from DSNJU004.

Next, run the change log inventory (DSNJU003) utility to create a conditional restart record with the CHKPTRBA option speci-
During restart, the state of a logged unit of recovery and the state of the global transaction which the unit of recovery is part of are incompatible.

System Action: The restart processing abnormally terminates, which terminates the subsystem. This is to prevent the loss or incorrect processing of a DB2 unit of recovery.

Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is scheduled.

Repeat this process, going down the checkpoint queue until DB2 restarts. This will be prior to the time when the invalid RBA was written to the log. The restart process is then able to apply all the log records to the end of the log. For information on running the DSNJU004 and DSNJU003 utilities, refer to DB2 Utility Guide and Reference.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

---

Problem Determination: The state of the logged unit of recovery is reported in register 1 and the state of the global transaction is provided in register 2. The meanings of these values are shown below.

- **Unit of recovery state (in register 1):**
  - 1 inflight
  - 2 ensure abort
  - 3 commit indoubt
  - 4 ensure commit

- **Global Transaction State (in register 2):**
  - 1 inflight
  - 2 ensure abort
  - 3 commit indoubt
  - 4 ensure commit

System Programmer Response: Do not attempt to restart DB2 until the error is resolved. Notify the system programmer and collect the following diagnostic items listed in "Appendix B, Problem Determination" on page 1051:

- 1, 3, 5

System Programmer Response: Print the BSDS using the Print Log Map (DSNJU004) utility. Find the checkpoint queue in the output listing from DSNJU004.

Next, run the Change Log Inventory (DSNJU003) utility to create a conditional restart record with the CHKPTRBA option specifying the begin checkpoint RBA found in the second entry of the checkpoint queue. Restart DB2 using the conditional restart record found. If the same failure occurs, repeat the conditional process using the next begin checkpoint RBA in the checkpoint queue.

Repeat this process, going down the checkpoint queue until DB2 restarts. This will be prior to the time when the invalid record was written to the log. The restart process then applies all the log records to the end of the log. For information on running DSNJU004 and DSNJU003, see DB2 Utility Guide and Reference.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

---

**Problem:** An invalid record was read from the log during the current status rebuild phase of restart. Restart cannot process the damaged log record.

**System Action:** The restart processing will abnormally terminate, which will terminate the subsystem. This is to prevent the loss or incorrect processing of a DB2 unit of recovery.

Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is scheduled. The first 4 digits of the RBA of the invalid log record is contained in register 3 and the last 8 digits in register 4.

**Operator Response:** Do not attempt to restart DB2 until the error is resolved. Notify the system programmer and collect the following diagnostic items listed in "Appendix B, Problem Determination" on page 1051:

- 1, 3, 5

**System Programmer Response:** Print the BSDS using the Print Log Map (DSNJU004) utility. Find the checkpoint queue in the output listing from DSNJU004.

Next, run the Change Log Inventory (DSNJU003) utility to create a conditional restart record with the CHKPTRBA option specifying the begin checkpoint RBA found in the second entry of the checkpoint queue. Restart DB2 using the conditional restart record found. If the same failure occurs, repeat the conditional process using the next begin checkpoint RBA in the checkpoint queue.

Repeat this process, going down the checkpoint queue until DB2 restarts. This will be prior to the time when the invalid record was written to the log. The restart process then applies all the log records to the end of the log. For information on running DSNJU004 and DSNJU003, see DB2 Utility Guide and Reference.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

---

**Problem:** The commit/abort FRR (DSNRCAFR) invoked DB2 subsystem termination, because an unrecoverable error was detected during most-complete processing for phase 2 of a commit-UR request.

This is a DB2 subsystem termination reason code. For further information, see "IRLM Abend Reason Codes" on page 1037.

This reason code is issued by the following CSECTs: DSNRCAFR, DSNRUC02

**System Action:** Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested for the original error before DB2 subsystem termination is initiated.

**Operator Response:** Print SYS1.LOGREC, and restart DB2.

**System Programmer Response:** Obtain a copy of SYS1.LOGREC and the SVC dump for the original error.

**Problem Determination:** See the original error.
# 00D93002
Explanation: The DB2 subsystem is terminated because an unrecoverable error was detected during must-complete processing for phase 2 of a commit-UR request for an agent that is a participant in a global transaction.

This is a DB2 subsystem termination reason code. For further information, see "IRLM Abend Reason Codes" on page 1037.

System Action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested for the original error before DB2 subsystem termination is initiated.

Operator Response: Print SYS1.LOGREC, and restart DB2. Notify the system programmer.

System Programmer Response: This is probably either an error in DB2 or in the commit of the global transaction. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: DB2 records on the SYS1.LOGREC data set and requests an SVC dump. The error indicates that there may be a problem with DB2 or with the commit coordinator of the global transaction.

Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051: 1, 2, 5.

---

00D9300F
Explanation: The commit/abort secondary FRR invoked DB2 subsystem termination. This occurs only if functional recovery itself fails while processing a failure during must-complete processing for phase 2 of a commit-UR request.

This is a DB2 subsystem termination reason code. For further information, see "IRLM Abend Reason Codes" on page 1037.

System Action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested for the original error. Standard DB2 diagnostic information is also recorded in SYS1.LOGREC for the secondary error before DB2 subsystem termination is initiated.

Operator Response: Print SYS1.LOGREC, and restart DB2.

System Programmer Response: Obtain a copy of SYS1.LOGREC for both the original and the secondary error, and the SVC dump for the original error.

Problem Determination: See the original error.

---

00D93011
Explanation: A subcomponent of DB2 invoked commit when the agent state was invalid for commit-UR invocation. Commit-UR was requested for an agent that was modifying data. Either commit-UR or abort-UR was already in process, or the recovery structure (URE) was damaged.

This abend reason code is issued by the following CSECT: DSNRUC01

System Action: Abnormal termination of the agent results, including backing out (abort-UR) of its activity to the previous point of consistency. This releases all locks held by the agent for its resources.

Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is scheduled. Additional information, identified in the SDWA variable recording area by reason code '00D9CCCC', is added to the SDWA variable recording area (VRA).

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

If the agent were in a must-complete state (in-commit2 or in-abort), the DB2 subsystem is also terminated with reason code '00D93001'. When the subsystem is next restarted, recoverable activity for this agent (such as an ensure-abort or ensure-commit UR) is handled to complete the commit or abort process.

System Programmer Response: This is a DB2 subsystem error. Collect the materials mentioned in the Problem Determination section of this message.

Problem Determination: Examine the SYS1.LOGREC data and the DB2 trace table in the dump to establish whether either commit-UR was invoked incorrectly or the control structure that reflects the state (ACEPROG, UREPROG) was damaged.

---

00D93012
Explanation: A subcomponent of DB2 invoked commit when the agent state was invalid for commit-UR invocation. Commit-UR was invoked for an agent that was only retrieving data. Either commit-UR or abort-UR was already in process, or the ACE progress state field was damaged.

This abend reason code is issued by the following CSECT: DSNRUC01

System Action: Abnormal termination of the agent results, including backing out (abort-UR) of its activity to the previous point of consistency. This releases all locks held by the agent for its resources.

Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is scheduled. Additional information, identified in the SDWA variable recording area by reason code '00D9CCCC', is added to the SDWA variable recording area.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

System Programmer Response: This is a DB2 subsystem error. Collect the materials mentioned in the Problem Determination section of this message.

Problem Determination: Examine the SYS1.LOGREC data and the DB2 trace table in the dump to establish whether either commit-UR was invoked incorrectly or the control structure (ACEPROG) was damaged.

---

00D93013
Explanation: The request to commit an agent that was a participant in a global transaction failed because a mismatch between the state of the agent and the state of the global transaction. State field was damaged.

System Action: Abnormal termination of the agent occurs, including backing out (abort-UR) its activity to the previous point of consistency. This releases all resource locks held by the agent.

Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is scheduled.

Operator Response: Notify the system programmer.
# System Programmer Response:  This is probably either an error in DB2 or in the commit of the global transaction. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

# Problem Determination:  DB2 records on the SYS1.LOGREC data set and requests an SVC dump. The error indicates that there may be a problem with DB2 or with the commit coordinator of the global transaction.

# Collect the following diagnostic items listed in Appendix B:  "Problem determination" on page 1051 1, 2, 5.

### 00D93100

**Explanation:**  This reason code indicates that a DB2 allied agent does not need to participate in the Phase 2 (Continue Commit) call, because all required work has been accomplished during the Phase 1 (Prepare) call. This reason code is generated by Recovery Manager when it is determined that a DB2 allied agent has not updated any DB2 resource since its last commit processing occurred.

**System Action:**  The "yes" vote is registered with the Commit coordinator.

### 00D94001

**Explanation:**  The commit/abort FRR (DSNRCAF) invoked DB2 subsystem termination, because an unrecoverable error was detected during must-complete processing for an abort-UR request.

This is a DB2 subsystem termination reason code.

This reason code is issued by the following CSECTs: DSNRCAF, DSNRUA02

**System Action:**  Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested for the original error before DB2 subsystem termination is initiated.

**Operator Response:**  Print SYS1.LOGREC, and restart DB2.

**System Programmer Response:**  Obtain a copy of the SYS1.LOGREC and the SVC dump for the original error.

**Problem Determination:**  See the reason code for the original error.

### 00D94002

**Explanation:**  The DB2 subsystem is terminated because an unrecoverable error was detected during must-complete processing for an abort-UR request for an agent that is a participant in a global transaction.

This is a DB2 subsystem termination reason code.

**System Action:**  Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested for the original error before DB2 subsystem termination is initiated.

**Operator Response:**  Print SYS1.LOGREC, and restart DB2.

**System Programmer Response:**  Notify the system programmer.

**Problem Determination:**  DB2 records on the SYS1.LOGREC data set and requests an SVC dump. The error indicates that there may be a problem with DB2 or with the commit coordinator of the global transaction.

**Collect the following diagnostic items listed in Appendix B:  "Problem determination" on page 1051 1, 2, 5.**

### 00D9400F

**Explanation:**  The commit/abort FRR invoked DB2 subsystem termination. This occurs only if functional recovery itself fails while processing a failure during must-complete processing for an abort-UR request.

This is a DB2 subsystem termination reason code. For further information, see "IRLM Abend Reason Codes" on page 1037

**System Action:**  Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested for the original error. Standard DB2 diagnostic information is also recorded in SYS1.LOGREC for the secondary error before DB2 subsystem termination is initiated.

**Operator Response:**  Print SYS1.LOGREC, and restart DB2.

**System Programmer Response:**  Obtain a copy of the SYS1.LOGREC for both the original and the secondary error, and the SVC dump for the original error.

**Problem Determination:**  See the original error.

### 00D94011

**Explanation:**  A subcomponent of DB2 invoked abort at a point when the agent state is invalid for invoking the function that aborts units of recovery. Either abort-UR or commit-UR phase 2 was already in process, or the agent structure was damaged.

This abend reason code is issued by the following CSECT: DSNRUA01

**System Action:**  Abnormal termination of the agent results and, because the agent is in a must-complete state, the DB2 subsystem is terminated with reason code '00D94001'. When the DB2 subsystem is restarted, recoverable activity for this agent is handled to complete the commit or abort process.

Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is scheduled. Additional information, identified in the SDWA variable recording area by reason code '00D9AAAA7', is added to the SDWA variable recording area. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**System Programmer Response:**  This is a DB2 subsystem error. Collect the materials mentioned in the Problem Determination section of this message.

**Problem Determination:**  Examine the SYS1.LOGREC data and the DB2 trace table in the dump to establish whether commit-UR was invoked incorrectly or the control structure (ACEPROG, UREPROG) was damaged.

### 00D94012

**Explanation:**  During rollback, the end of the log was read before all the expected log ranges were processed. The abend is accompanied by a DB2 abnormal subsystem termination with reason code 00D94001.

This reason code is issued by the following CSECT: DSNRUA02

**System Action:**  The agent is abnormally terminated.
Because the agent is in a must-complete state, the DB2 sub-system is terminated with reason code 00D94001 and message DSNV086E. Standard DB2 diagnostic information is recorded in SYS1.LOGREC. An 04E-D94012 SVC dump is requested.

**Operator Response:**
1. Run the print log map (DSNJU004) utility to print the content of both BSDSs.
2. Print SYS1.LOGREC.
3. Use the MVS DISPLAY DUMP command to get the failure reason code from dump titles.
4. Notify your system programmer.

**System Programmer Response:** Obtain a copy of the SYS1.LOGREC and the SVC dump for the original error. Refer to the recovery scenarios in Section 4 (Volume 1) of DB2 Administration Guide before restarting.

To restart DB2, you must do one of the following:
- Add the missing archive log data sets back to the BSDS with the change log inventory (DSNJU003) utility and increase the MAXARCH parameter in the DSN6LOGP member of DSNZPARM to complete the rollback, or
- Restart DB2 with a conditional restart specifying BACKOUT=NO to bypass the unit of recovery that is in-abort.

**Problem Determination:** At the time of the abend, registers 3 and 4 contain the 6-byte relative byte address (RBA) of the beginning of this unit of recovery. DB2 must read the log back to this point to complete the ROLLBACK of this unit of recovery.

---

**00D94014**

**Explanation:** A savepoint request encountered an invalid request block. This is an internal error.

**System Action:** Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested.

**Operator Response:** Collect all relevant diagnostic materials, including SYS1.LOGREC, SVC dump, and console output. Notify the system programmer.

**Problem Determination:** At the time of the abend, general register zero contains the address of the invalid SRPL request block.

---

**00D95001**

**Explanation:** The recovery manager's common FRR (DSNRCRFR) invoked DB2 subsystem termination, because an unrecoverable error was detected during checkpoint (DSNRCPRC) processing.

This is a DB2 subsystem termination reason code. For further information, see "IRLM Abend Reason Codes" on page 1037

This reason code is issued by the following CSECTs: DSNRCRFR, DSNRCPRC

**System Action:** Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested for the original error before DB2 subsystem termination is initiated.

**Operator Response:** Print SYS1.LOGREC, and restart DB2.

---

**00D96011**

**Explanation:** The restart participation FRR invoked DB2 subsystem termination, because an unrecoverable error was detected during the restart processor (DSNRPRRC) processing.

This is a DB2 subsystem termination reason code. For further information, see "IRLM Abend Reason Codes" on page 1037

This reason code is issued by the following CSECT: DSNRPBCS

**System Action:** Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested for the original error before DB2 subsystem termination is initiated.

**Operator Response:** Print SYS1.LOGREC, correct the problem, and restart DB2.
**System Programmer Response:** Obtain a copy of the SYS1.LOGREC and the SVC dump for the original error.

**Problem Determination:** See the original error.

---

**00D96021**

**Explanation:** The DB2 subsystem was terminated during restart because a failure occurred while attempting to read the log forward MODE(DIRECT). It is accompanied by a recovery log manager abend X’04E’ with a reason code describing the specific failure. Each time a portion of the log is skipped, a read direct is used to validate the beginning RBA of the portion that is read. This is a DB2 subsystem termination reason code. For further information, see [IRLM Abend Reason Codes on page 1037](#).

This reason code is issued by the following CSECTs: DSNRHSR, DSNRCSR

**System Action:** Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested for the original error before DB2 subsystem termination is initiated.

**Operator Response:**

1. Run the print log map (DSNJU004) utility to print content of both BSDSs.
2. Print SYS1.LOGREC.
3. Follow instructions for the accompanying recovery log manager error. Use the MVS DISPLAY DUMP command to get the failure reason code from dump titles.

**System Programmer Response:** Obtain a copy of the SYS1.LOGREC and the SVC dump for the original error. If possible, correct cause of original error and restart DB2. If you cannot correct the error, refer to Section 4 (Volume 1) of [DB2 Administration Guide](#).

---

**00D96022**

**Explanation:** The restart FRR invoked abend, because, while reading the log forward during restart, the end-of-log was read before all recovery log scopes had been processed. It is followed by DB2 abnormal subsystem termination with the same reason code ("00D96022").

This is a DB2 subsystem termination reason code. For further information, see [IRLM Abend Reason Codes on page 1037](#).

This reason code is issued by the following CSECT: DSNRRHSSR

**System Action:** Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested for the original error before DB2 subsystem termination is initiated.

**Operator Response:**

1. Run the print log map (DSNJU004) utility to print content of both BSDSs.
2. Print SYS1.LOGREC.
3. Follow instructions for the accompanying recovery log manager error. Use the MVS DISPLAY DUMP command to get the failure reason code from dump titles.
4. Notify your system programmer.

---

**00D96031**

**Explanation:** The restart FRR invoked DB2 subsystem termination, because a failure occurred while attempting to read the log backward MODE(DIRECT). It is accompanied by a recovery log manager abend X’04E’ with a reason code describing the specific failure. Each time a portion of the log is skipped, a read direct is used to validate the beginning RBA of the portion that is read. This is a DB2 subsystem termination reason code. For further information, see [IRLM Abend Reason Codes on page 1037](#).

This reason code is issued by the following CSECT: DSNRRAUB

**System Action:** Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested for the original error before DB2 subsystem termination is initiated.

**Operator Response:**

1. Run the print log map (DSNJU004) utility to print content of both BSDSs.
2. Print SYS1.LOGREC.
3. Follow instructions for the accompanying recovery log manager error. Use the MVS DISPLAY DUMP command to get the failure reason code from dump titles.
4. Start DB2 again.

**System Programmer Response:** Obtain a copy of the SYS1.LOGREC and the SVC dump for the original error.

**Problem Determination:** See the accompanying abend reason code.

---

**00D96032**

**Explanation:** During restart, the end of the log was read before all the expected log ranges had been processed. The abend is accompanied by a DB2 abnormal subsystem termination with the same reason code ("00D96032").

This is a DB2 subsystem termination reason code. For further information, see [IRLM Abend Reason Codes on page 1037](#).

This reason code is issued by the following CSECT: DSNRRAUB

**System Action:** Standard DB2 diagnostic information is recorded in SYS1.LOGREC. A 04E-D96032 SVC dump is requested. The DB2 subsystem is terminated with DSNV086E message.

**Operator Response:**

1. Run the print log map (DSNJU004) utility to print content of both BSDSs.
2. Print SYS1.LOGREC.
3. Use the MVS DISPLAY DUMP command to get the failure reason code from dump titles.
4. Notify your system programmer.

**System Programmer Response:** Obtain a copy of the SYS1.LOGREC and the SVC dump for the original error. Determine where the log went. Refer to Section 4 (Volume 1) of [DB2 Administration Guide](#) before restarting.
**Problem Determination:** At the time of the abend, registers 2 and 3 contain the 6-byte relative byte address (RBA) of the last log record that was read before end-of-log was encountered.

---

**00D96041**

**Explanation:** The recovery manager’s restart function detected an internal error.

This abend reason code is issued by the following CSECT: DSNRXRU

**System Action:** Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested for the error. For more information see message DSNL429.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** See message DSNL429 for more information.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051, 1, 3, 5.

---

**00D98001**

**Explanation:** The recovery manager’s common FRR (DSNRRCFR) invoked DB2 subsystem termination, because an unrecoverable error was detected during indoubt-UR (DSNRRIPR, DSNRRIRD, DSNRRIUN, DSNRIPMU) processing.

This is a DB2 subsystem termination reason code. For further information, see [IRLM Abend Reason Codes on page 1037](#).

This reason code is issued by the following CSECT: DSNRCFR

**System Action:** Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested for the original error before DB2 subsystem termination is initiated.

**Operator Response:** Print SYS1.LOGREC, restart DB2.

**System Programmer Response:** Obtain a copy of the SYS1.LOGREC and the SVC dump for the original error.

**Problem Determination:** See the original error.

---

**00D98011**

**Explanation:** The FRR for the resolve-indoubt-UR request servicer (DSNRIURS) invoked DB2 subsystem termination, because an unrecoverable error was detected processing a request.

This is a DB2 subsystem termination reason code. For further information, see [IRLM Abend Reason Codes on page 1037](#).

This reason code is issued by the following CSECT: DSNRIURS

**System Action:** Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested for the original error before DB2 subsystem termination is initiated.

**Operator Response:** Print SYS1.LOGREC, and restart DB2.

**System Programmer Response:** Obtain a copy of the SYS1.LOGREC and the SVC dump for the original error.

**Problem Determination:** See the accompanying abend reason code.

---

**00D98021**

**Explanation:** The resolved indoubt FRR invoked DB2 subsystem termination because of a failure while attempting to read the log MODE(DIRECT) during forward recovery. It is accompanied by a recovery log manager abend X’04E’ with a reason code describing the specific failure.

Each time a portion of the log is skipped, a read direct is used to validate the beginning RBA of the portion that is read.

This is a DB2 subsystem termination reason code. For further information, see [IRLM Abend Reason Codes on page 1037](#).

This reason code is issued by the following CSECT: DSNRRIRD

**System Action:** Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested for the original error before DB2 subsystem termination is initiated.

**Operator Response:**
1. Run the print log map (DSNJU004) utility to print content of both BSDSs.
2. Print SYS1.LOGREC.
3. Follow instructions for the accompanying recovery log manager error. Use the MVS DISPLAY DUMP command to get the failure reason code from dump titles.
4. Start DB2 again.

**System Programmer Response:** Obtain a copy of the SYS1.LOGREC and the SVC dump for the original error.

**Problem Determination:** See the accompanying abend reason code.

---

**00D98022**

**Explanation:** Resolved indoubt invoked abend when end-of-log was reached before all ranges had been processed for forward recovery. This abend is accompanied by abnormal DB2 subsystem termination with the same reason code (’00D98022’).

This is a DB2 subsystem termination reason code. For further information, see [IRLM Abend Reason Codes on page 1037](#).

This reason code is issued by the following CSECT: DSNRRIRD

**System Action:** Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested for the original error before DB2 subsystem termination is initiated.

**Operator Response:**
1. Run the print log map (DSNJU004) utility to print content of both BSDSs.
2. Print SYS1.LOGREC.
3. Follow instructions for the accompanying recovery log manager error. Use the MVS DISPLAY DUMP command to get the failure reason code from dump titles.
4. Start DB2 again.

**System Programmer Response:** Obtain a copy of the SYS1.LOGREC and the SVC dump for the original error.

**Problem Determination:** At the time of the abort, registers 2 and 3 contain the 6-byte relative byte address (RBA) of the last log record that was read before end-of-log was encountered.
00D98031

**Explanation:** The resolved indoubt FRR invoked DB2 subsystem termination, because a failure occurred during an attempt to read the log MODE(DIRECT) while reading the log backward. It is accompanied by a recovery log manager abend X'04E' with a reason code describing the specific failure. Each time a portion of the log is skipped, a read direct is used to validate the begin-scope RBA of the portion that is read.

This is a DB2 subsystem termination reason code. For further information, see [IRLM Abend Reason Codes](#).

This reason code is issued by the following CSECT: DSNRRIUN

**System Action:** Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested for the original error before DB2 subsystem termination is initiated.

**Operator Response:**
1. Run the print log map (DSNJU004) utility to print content of both BSDSs.
2. Print SYS1.LOGREC.
3. Follow instructions for the accompanying recovery log manager error. Use the MVS DISPLAY DUMP command to get the failure reason code from dump titles.
4. Start DB2 again.

**System Programmer Response:** Obtain a copy of the SYS1.LOGREC and the SVC dump for the original error.

**Problem Determination:** See the accompanying abend reason code.

00D98032

**Explanation:** Resolved indoubt FRR invoked abend when end-of-log was reached before all ranges had been processed for backward recovery. This abend is accompanied by abnormal DB2 subsystem termination with the same reason code (‘00D98032’).

This is a DB2 subsystem termination reason code. For further information, see [IRLM Abend Reason Codes](#).

This reason code is issued by the following CSECT: DSNRRIUN

**System Action:** Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested for the original error before DB2 subsystem termination is initiated.

**Operator Response:**
1. Run the print log map (DSNJU004) utility to print content of both BSDSs.
2. Print SYS1.LOGREC.
3. Follow instructions for the accompanying recovery log manager error. Use the MVS DISPLAY DUMP command to get the failure reason code from dump titles.
4. Start DB2 again.

**System Programmer Response:** Obtain a copy of the SYS1.LOGREC and the SVC dump for the original error.

**Problem Determination:** At the time of the abend, registers 2 and 3 contain the 6-byte relative byte address (RBA) of the last log record that was read before end-of-log was encountered.

00D99001

**Explanation:** An attempt to read the CHKPTRBA failed to return a valid checkpoint record. This abend is issued after the DSNR015I error message is issued.

**System Action:** Restart is abended.

**Operator Response:** Inform the system programmer.

**System Programmer Response:** Let the change log inventory (DSNJU003) utility select the checkpoint RBA when building the conditional restart record. If a specific checkpoint is desired, use DSN1LOGP to print out the checkpoint log records within a specified range. If manual selection of the checkpoint RBA is desired, use the print log map (DSNJU004) utility to print the checkpoint queue. Print the checkpoint queue by using the CHKPTRBA keyword.

**Problem Determination:**
- Print the checkpoint records within the desired range using DSN1LOGP.
- Print the checkpoint queue using DSNJU004.
- Verify the checkpoint queue against the DSN1LOGP report.
- If automatic checkpoint selection was used and the checkpoint was invalid, find the valid checkpoint RBA in the DSN1LOGP report. Use this checkpoint RBA in the CRCTR using the CHKPTRBA keyword.
- If an explicit checkpoint was specified and the checkpoint was invalid, let DSNJU003 automatically choose the checkpoint by not specifying a CHKPTRBA keyword.

00D99002

**Explanation:** Validation of the STARTTRBA failed because either the end of the log was reached, or a bad log record was encountered while attempting to find the first complete log record.

**System Action:** Restart abends.

**Operator Response:** Inform the system programmer.

**System Programmer Response:** Check the console log for DSNJ (Log Manager) messages; these may indicate failures in the Log Manager processing, or may reveal additional useful information for diagnostic purposes. Use DSN1LOGP to find a safe STARTTRBA to use for restart. If a STARTTRBA is specified, the Recovery Manager will use it as a starting point. From the starting point, the Recovery Manager will attempt to find the beginning of a valid log record.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, *Problem determination* on page 1051: 1, 16.

00D99003

**Explanation:** CSRONLY was specified in the conditional restart record. Only the DB2 status phase of restart will complete.

**System Action:** Restart abends.

**System Programmer Response:** Use the change log inventory (DSNJU003) utility to cancel the current conditional restart record or create a new conditional restart record.
**00D99004**

Explanation: A log read failed because an internal error was detected by the data manager while examining the log record during DB2 restart.

This abend reason code is issued by the following CSECT: DSNRHHSL

System Action: The execution unit writes a record to SYS1.LOGREC and requests a SVC dump. Restart abends.

User Response: Notify the system programmer.

Operator Response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System Programmer Response: Obtain the SYS1.LOGREC and the SVC dump. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: RM standard diagnostic information is provided in “Recovery Manager Reason Codes (X’D9’)”. In addition, the following diagnostic information is provided in registers:

<table>
<thead>
<tr>
<th>Register</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>The data manager ERQUAL that identifies the place within the data manager filter routine where the error was detected</td>
</tr>
<tr>
<td>2,3</td>
<td>The RBA of the log record that was being read at the time of the error</td>
</tr>
<tr>
<td>8</td>
<td>The address of ssnmDBM1’s selection block</td>
</tr>
<tr>
<td>9</td>
<td>The address of DSCF’s selection block</td>
</tr>
</tbody>
</table>

**00D99900**

Explanation: The request to commit the unit of recovery failed because the agent is a participant in a global transaction and the global transaction is going to be backed out.

System Action: The unit of recovery is not committed.

User Response: The application must roll back to the previous COMMIT.

**00D9AAAAA**

Explanation: This reason code identifies additional data stored in the SDWA variable recording area following a failure during begin-UR. This reason code appears only in the SDWA variable recording area (VRA) and it serves only to identify data (in addition to the standard DB2 diagnostic information, stored in the SDWA). This reason code is the first data item of the standard information. As such, it always appears in the VRA of an SDWA for a primary error completion/reason code. If no data is added, the reason code in the SDWA VRA is the same as that associated with the completion code.

This reason code is issued by the following CSECT: DSNRUB01

System Action: The following data is stored preceded by code VRAHEX.

<table>
<thead>
<tr>
<th>Length</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Content of ACEURE</td>
</tr>
<tr>
<td>4</td>
<td>URE address</td>
</tr>
<tr>
<td>4</td>
<td>DSNWRCRD return code</td>
</tr>
<tr>
<td>1</td>
<td>Retry flags</td>
</tr>
</tbody>
</table>

System Programmer Response: Use this information with the instructions for the specific failure. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**00D99CCCC**

Explanation: This reason code identifies additional data stored in the SDWA variable recording area following a failure during commit-UR. This reason code appears only in the SDWA variable recording area (VRA) and serves only to identify data (in addition to the standard DB2 diagnostic information, stored in the SDWA). This reason code is the first data item of the standard information. As such, it always appears in the VRA of an SDWA for a primary error completion/reason code. If no data is added, the reason code in the SDWA VRA is the same as that associated with the completion code.

This reason code is issued by the following CSECT: DSNRCAF

System Action: Five bytes of data preceded by code VRAHEX are stored following the EBCDIC string ‘RMC-COMMIT/ABORT’.

<table>
<thead>
<tr>
<th>Length</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 byte</td>
<td>Retry id</td>
</tr>
<tr>
<td>1 byte</td>
<td>Notification RMID</td>
</tr>
<tr>
<td>1 byte</td>
<td>ACE progress state (ACEPROG)</td>
</tr>
<tr>
<td>1 bit</td>
<td>In flight</td>
</tr>
<tr>
<td>1 bit</td>
<td>In-Commit1</td>
</tr>
<tr>
<td>1 bit</td>
<td>In-Commit2</td>
</tr>
<tr>
<td>1 bit</td>
<td>End-Commit</td>
</tr>
<tr>
<td>1 bit</td>
<td>In-Absnt</td>
</tr>
<tr>
<td>1 bit</td>
<td>End-Abort</td>
</tr>
<tr>
<td>1 bit</td>
<td>Reserved</td>
</tr>
</tbody>
</table>
System Programmer Response: Use this information with the instructions for the specific failure. If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**00D9EEE**

**Explanation:** This reason code identifies additional data stored in the SDWA variable recording area following a failure during end-UR.

This reason code appears only in the SDWA variable recording area (VRA) and serves only to identify data (in addition to the standard DB2 diagnostic information, stored in the SDWA). This reason code is the first data item of the standard information. As such, it always appears in the VRA of an SDWA for a primary error completion/reason code.

This reason code is issued by the following CSECT: DSNRUE01

**System Action:** The following data is stored preceded by code VRAHEX.

<table>
<thead>
<tr>
<th>Length</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>URE address</td>
</tr>
<tr>
<td>4</td>
<td>DSNWRCRD return code</td>
</tr>
</tbody>
</table>

System Programmer Response: Use this information in conjunction with the information about the error completion code. If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.
X'E2......' Codes

00E20001
Explanation: The get variable storage function detected that input parameters passed by the invoker were invalid.
This abend reason code is issued by the following CSECT: DSNSVBK
| System Action: The agent is abended.
| Operator Response: Notify the system programmer.
| System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
| Problem Determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. The following general purpose registers contain the indicated diagnostic information:
  Register 4 contains the address of the pool header block (PHB), which contains information for the current status of the pool.
  Register 7 contains the value of the caller’s saved register 14.
  Register 3 contains the input request length.
  Register 5 contains the input request owner ID.
Offset X’1EF’ in the SDWA contains a VRACAN key of X’3D’, followed by the module name of the Storage Manager invoker.
Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2, 3, 5.

00E20002
Explanation: The free variable storage function detected that input parameters (either the pool address or the pool type) passed by the invoker were invalid.
This abend reason code is issued by the following CSECT: DSNSVBK
| System Action: The agent is abended.
| Operator Response: Notify the system programmer.
| System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
| Problem Determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. The following general purpose registers contain the indicated diagnostic information:
  Register 4 contains the address of the pool header block (PHB), which contains information for the current status of the pool.
  Register 7 contains the value of the caller’s saved register 14.
Offset X’1EF’ in the SDWA contains a VRACAN key of X’3D’, followed by the module name of the Storage Manager invoker.
Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2, 3, 5.

00E20003
Explanation: In order to satisfy an unconditional request for storage, the get variable storage function needed to obtain storage (from GETMAIN) to expand a storage pool. However, GETMAIN indicated that sufficient storage in the private area was not available.
This abend reason code is issued by the following CSECT: DSNSVBK
| System Action: The agent is abended.
| Operator Response: Notify the system programmer.
| System Programmer Response: Increase region size. If the region size is already defined at the maximum, consider enabling the CONTSTOR system initialization parameter. For more information, see DB2 Installation Guide.
| Problem Determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. Register 2 contains the ASID, in hexadecimal, of the private area to be printed. Register 4 contains the address of the pool header block (PHB). Register 7 contains the value of the caller’s saved register 14.
At offset 1EF in the SDWA, there is a VRACAN key of ‘3D’ (in HEX), followed by the module name of the Storage Manager invoker. The trace information contains the requested amount of storage.
Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2, 3, 5.

00E20004
Explanation: In order to satisfy an unconditional request for storage, the get variable storage function needed to obtain additional storage (from GETMAIN) to expand a storage pool. However, the pool attributes defined at the time the pool was created indicated that the pool was already at maximum size.
This abend reason code is issued by the following CSECT: DSNSVBK
| System Action: The agent is abended.
| Operator Response: Notify the system programmer.
| System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
| Problem Determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. Register 4 contains the address of the pool header block (PHB). Register 7 contains the value of the caller’s saved register 14.
At offset 1EF in the SDWA, there is a VRACAN key of ‘3D’ (in HEX), followed by the module name of the Storage Manager invoker.
Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2, 3, 5.
00E20005
Explanation: The free variable storage function detected that the address of a block being freed was invalid. That is, it did not lie within an existing storage pool.

This abend reason code is issued by the following CSECT: DSNVPL

System Action: The agent is abended.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem Determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. Register 4 contains the address of the pool header block (PHB). Register 7 contains the value of the caller’s saved register 14. Register 11 contains the address of the invalid block to be freed.

At offset 1EF in the SDWA, there is a VRACAN key of ‘3D’ (in HEX), followed by the module name of the Storage Manager invoker.

Collect the following diagnostic items listed in [Appendix B], “Problem determination” on page 1051: 1, 2, 3, 5.

---

00E20006
Explanation: The free variable storage function detected that the block being freed was not allocated. That is, it was already free.

This abend reason code is issued by the following CSECT: DSNVPL

System Action: The agent is abended.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem Determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. Register 4 contains the address of the pool header block (PHB). Register 7 contains the value of the caller’s saved register 14. Register 11 contains the address of the free block.

At offset 1EF in the SDWA, there is a VRACAN key of ‘3D’ (in HEX), followed by the module name of the Storage Manager invoker.

Collect the following diagnostic items listed in [Appendix B], “Problem determination” on page 1051: 1, 2, 3, 5.

---

00E20007
Explanation: The allocate variable storage pool function detected that the input parameters passed by the invoker were invalid.

This abend reason code is issued by the following CSECT: DSNVPL

System Action: The agent is abended.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem Determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. The following general purpose registers contain the indicated diagnostic information:

- Register 2 contains the input parameter list address.
- Register 3 contains the input maximum pool size.
- Register 4 contains the input expansion segment size.
- Register 5 contains the input initial segment size.

The trace information contains the address of the invalid parameter list.

Collect the following diagnostic items listed in [Appendix B], “Problem determination” on page 1051: 1, 2, 3, 5.

---

00E20008
Explanation: The get fixed blocks function detected that input parameters passed by the invoker were invalid.

This abend reason code is issued by the following CSECT: DSNVPL

System Action: The agent is abended.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem Determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. The trace information contains the address of the invalid PHB (pool header block).

Collect the following diagnostic items listed in [Appendix B], “Problem determination” on page 1051: 1, 2, 3, 5.

---

00E20009
Explanation: The get fixed blocks function detected that input parameters passed by the invoker were invalid.

This abend reason code is issued by the following CSECT: DSNVPL

System Action: The agent is abended.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem Determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. The following general purpose registers contain the indicated diagnostic information:

- Register 4 contains the address of the pool header block (PHB).
- Register 7 contains the value of the caller’s saved register 14.
- Register 5 contains the number of blocks requested.

The invalid input parameters are also contained in the trace information.

Offset X’1EF’ in the SDWA contains a VRACAN key of X’3D’, followed by the module name of the Storage Manager invoker.
Collect the following diagnostic items listed in Appendix B: "Problem determination" on page 1051 1, 2, 3, 5.

00E2000A

Explanation: The get tracked storage function requested storage from the DSNSGETM function for a tracking element in order to track the storage to be returned to the invoker. However, storage for the tracking element was unavailable. The invoker’s request was unconditional.

This abend reason code is issued by the following CSECT: DSNSGMN

System Action: The agent is abended.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. Register 2 contains the ASID, in hexadecimal, of the private area to be printed. Register 4 contains the address of the pool header block (PHB). Register 7 contains the value of the caller’s saved register 14. The trace information contains the number of blocks requested.

At offset 1EF in the SDWA, there is a VRACAN key of ‘3D’ (in HEX), followed by the module name of the Storage Manager invoker.

Collect the following diagnostic items listed in Appendix B: "Problem determination" on page 1051 1, 2, 3, 5.

00E2000B

Explanation: In order to satisfy an unconditional request, the get fixed block(s) function needed to obtain additional storage to expand a storage pool. However, GETMAIN indicated that insufficient storage existed in the private area.

This abend reason code is issued by the following CSECT: DSNSFBK

System Action: The agent is abended.

Operator Response: Notify the system programmer.

System Programmer Response: Increase region size. If the region size is already defined at the maximum, consider enabling the CONTSTOR system initialization parameter. For more information, see DB2 Installation Guide.

Problem Determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. Register 2 contains the ASID, in hexadecimal, of the private area to be printed. Register 4 contains the address of the pool header block (PHB). Register 7 contains the value of the caller’s saved register 14. The trace information contains the number of blocks requested.

At offset 1EF in the SDWA, there is a VRACAN key of ‘3D’ (in HEX), followed by the module name of the Storage Manager invoker.

Collect the following diagnostic items listed in Appendix B: "Problem determination" on page 1051 1, 2, 3, 5.

00E2000C

Explanation: In order to satisfy an unconditional request, the get fixed block(s) function needed to obtain additional storage to expand a storage pool. However, the pool attributes defined at the time the pool was created indicated that the pool was already at maximum size.

This abend reason code is issued by the following CSECT: DSNSFBK

System Action: The agent is abended.

Operator Response: Notify the system programmer.

Problem Determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. Register 4 contains the address of the pool header block (PHB). Register 7 contains the value of the caller’s saved register 14. The trace information contains the number of blocks requested.

At offset X ‘1EF’ in the SDWA, there is a VRACAN key of ‘3D’, followed by the module name of the Storage Manager invoker.

Collect the following diagnostic items listed in Appendix B: "Problem determination" on page 1051 1, 2, 3, 5.

00E2000D

Explanation: DB2 detected that either the address of a block being freed (the only block or a block on a chain of blocks) was invalid or the block did not lie within an existing storage pool.

System Action: The agent is abended.

Operator Response: Notify the system programmer.

System Programmer Response: The most likely cause of the problem is a storage overlay or an invalid storage request from a DB2 component. A product other than DB2 could cause the storage overlay problem.

Problem Determination: Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. Register 7 contains the value of the caller’s saved register 14. Register 11 contains the address of the invalid block to be freed.

At offset X ‘1EF’ in the SDWA, there is a VRACAN key of X ‘3D’, followed by the module name of the storage manager invoker.

Collect the following diagnostic items listed in Appendix B: "Problem determination" on page 1051 1, 2, 3, 5.

00E2000E

Explanation: DB2 detected that a segment of storage within the pool on which the request was directed was invalid or contained an invalid ‘free chain’ of free blocks in the segment.

System Action: The agent is abended.

Operator Response: Notify the system programmer.

System Programmer Response: The most likely cause of the problem is a storage overlay or an invalid storage request from a DB2 component. A product other than DB2 could cause the storage overlay problem.

Problem Determination: Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. Register 4 contains the address of the pool header block (PHB). Register 7 contains the value of the
caller’s saved register 14. Register 11 contains the address of the block to be freed if freeing a fixed block.

At offset X’1EF’ in the SDWA, there is a VRACAN key of X’3D’, followed by the module name of the Storage Manager invoker.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 2, 3, 5.

This abend reason code is issued by the following CSECT: DSNSFBK

00E2000F

Explanation: The free fixed-block pool function detected that the only block, or the one block on the chain of blocks, being freed did not represent an allocated block; that is, it was already free.

This abend reason code is issued by the following CSECT: DSNSFBK

System Action: The agent is abended.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. Register 4 contains the address of the pool header block (PHB). Register 7 contains the value of the caller’s saved register 14. Register 11 contains the address of the free block.

At offset 1EF in the SDWA, there is a VRACAN key of ‘3D’ (in HEX), followed by the module name of the Storage Manager invoker.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 2, 3, 5.

00E20010

Explanation: The allocate fixed-block pool function detected an invalid input parameter passed by its invoker.

This abend reason code is issued by the following CSECT: DSNSFPF

System Action: The agent is abended.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. The following general purpose registers contain the indicated diagnostic information:

- Register 2 contains the input parameter list address.
- Register 3 contains the input request block size.
- Register 4 contains the input maximum pool size.
- Register 5 contains the input expansion segment size.

The trace information also contains the address of the invalid parameter list.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 2, 3, 5.

00E20011

Explanation: The free fixed-block pool function detected that the input parameter either was not a valid pool header block (PHB), or it did not represent an existing pool.

This abend reason code is issued by the following CSECT: DSNSFPL

System Action: The agent is abended.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. The trace information has the address of the pool header block (PHB).

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 2, 3, 5.

00E20012

Explanation: The get tracked storage from the GETMAIN function detected an invalid input parameter passed by its invoker.

This abend reason code is issued by the following CSECT: DSNSGMN

System Action: The agent is abended.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. The following general purpose registers contain the indicated diagnostic information:

- Register 2 contains the input parameter list address.
- Register 3 contains the input request length.
- Register 4 contains the input storage class.

The trace information has the address of the invalid parameter list.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 2, 3, 5.

00E20013

Explanation: The get tracked storage from GETMAIN function was unable to obtain sufficient storage in private area to satisfy an unconditional request.

This abend reason code is issued by the following CSECT: DSNSGMN

System Action: The agent is abended.

Operator Response: Notify the system programmer.

System Programmer Response: Increase region size.

Problem Determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. Register 2 contains the ASID, in hexadecimal, of the private area to be printed. The trace information has the address of the parameter list.
Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051: 1, 2, 3, 5.

00E20014

Explanation: The free tracked storage function detected that the address requested to be freed was not valid. Either the address did not represent storage currently allocated (via the DSNSGETM function), or the storage class passed as input to DSNSFREM did not match the class assigned to the storage by DSNSGETM.

System Action: The agent is abended.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. Register 2 contains the ASID, in hexadecimal, of the private area to be printed.

Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051: 1, 2, 3, 5.

00E20015

Explanation: The allocate stack function, which is always unconditional, requested storage from GETMAIN to obtain a stack segment. GETMAIN indicated that 8K bytes of private area storage in subpool 229 was not available.

System Action: The agent is abended.

Operator Response: Notify the system programmer.

System Programmer Response: Increase maximum private storage.

Problem Determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. There is probably a shortage of private area storage in the address space in which the failure occurred. Register 2 contains the ASID, in hexadecimal, of the private area to be printed.

Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051: 1, 2, 3, 5.

00E20016

Explanation: The get stack storage function, in order to satisfy an unconditional request for stack storage, requested storage from GETMAIN. However, GETMAIN indicated that sufficient storage in subpool 229 was not available.

System Action: The agent is abended.

Operator Response: Notify the system programmer.

System Programmer Response: Increase region size.

Problem Determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. Register 2 contains the ASID, in hexadecimal, of the private area to be printed.

Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051: 1, 2, 3, 5.

00E20017

Explanation: The free stack storage function detected that the address of the area to be freed did not lie within allocated storage in the stack indicated by the requester.

System Action: The agent is abended.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. Register 2 contains the ASID, in hexadecimal, of the private area to be printed.

Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051: 1, 2, 3, 5.

00E20018

Explanation: The get stack storage function detected that the amount of storage requested by the invoker was less than or equal to zero.

This abend reason code is issued by the following CSECTs:

DSNB1CHK
DSNB1CPP
DSNB1CPS
DSNB1CST
DSNB1OPP
DSNB1OPS
DSNB1OCT
DSNB1RRR
DSNB1RTR
DSNB1SW5
DSNB1SWQ
DSNB1OCM
DSNFGENM
DSNBHJN
DSNICNV
DSNIWLEO
DSNILGBG
DSNILREP
DSNIKPR
DSNIRWLS
DSNS1S
DSNS1SEK
DSNISR1
DSNIVPT
DSNITDL
DSNJV1S1
DSNKOHP
DSNKDE
DSNKDLV
DSNKLPL
DSNKSRT
DSNKIV
DSNKMP1
DSNKM5V1
DSNNLNL
DSNRDST
DSNKRPL
DSNVCONN
DSNVDISC
DSNVWEUS
DSNVYLC
DSNVRMEL
DSNVSTAI
DSNWTRAC
DSNXAGZ
DSNXCIX
DSNXICX
DSNWX2
DSNXOGP
DSNXOLV
DSNXOPF
DSNXOVD
DSNX01S
DSNCT30
DSNI1S0
DSNS1CF

System Action: The agent is abended.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested.

Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051: 1, 2, 3, 5.

00E20019

Explanation: The purge pool function detected that input parameters passed by the invoker were invalid.

This abend reason code is issued by the following CSECT: DSNSPOWN

System Action: The agent is abended.

Operator Response: Notify the system programmer.

System Programmer Response: Increase region size.

Problem Determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested.
System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. The following general registers contain the indicated diagnostic information:

Register 4 contains the input pool address.

Register 5 contains the input pool owner ID.

The trace information also contains the input parameters.

Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051 1, 2, 3, 5.

00E2001A

Explanation: ESTAE recovery can not be established, because either an unexpected error occurred, or SCB is not available.

This abend reason code is issued by the following CSECT: DSNSCON

System Action: The agent is abended.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. Register 15 contains the return code from DSN3EST0; this is the MVS ESTAE return code.

Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051 1, 2, 3, 5.

00E2001B

Explanation: The SETLOCK OBTAIN function issued a nonzero return code.

This abend reason code is issued by the following CSECTs:

DSNSCON2  DSNCTL  DSNSFBK  DSNFPL
DSNSGW  DSNHSHW  DSNT  DSNTERM
DSNSV8  DSNSVP  DSNSVSTK

System Action: The invoker of storage manager functions is abnormally terminated.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested.

Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051 1, 2, 3, 5.

00E2001C

Explanation: The purge stack function detected that one of the SKBs (stack block) is not valid and the SKB chain is possibly damaged.

This abend reason code is issued by the following CSECT: DSNSPURS

System Action: The SKB chain is repaired and processing continues.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested.

Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051 1, 2, 3, 5.

00E2001D

Explanation: Either GPVT (global pool anchor) or LPVT (local pool anchor) is damaged, and no storage managed by storage manager can be accessed.

This abend reason code is issued by the following CSECT: DNSRSUP

System Action: The DB2 subsystem is abended. In some cases, the FRR is established by the caller of the storage manager (SM) subcomponent. When this is the case, the SVC dump is requested by the caller. When this is not the case, the SM requests the SVC dump.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: A DB2 dump is requested, but in some cases the dump request is made by the caller of storage manager, rather than by storage manager itself. Register 6 contains the address of the EB.

Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051 1, 2, 3, 5.

00E2001E

Explanation: The get stack storage function detected that two asynchronous (unrelated) agents use the same stack storage.

This abend reason code is issued by the following CSECT: DSNSSVTK

System Action: The agent is abended.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. Register 2 contains the address of the stack segment (SKB). Register 6 contains the address of the EB. In the event of an ABEND, DSNTFRCV saves information in the VRA of the SDWA.

Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051 1, 2, 3, 5.
00E2001F

Explanation: In order to satisfy an unconditional request for storage, the get variable storage function needed to obtain storage (from GETMAIN) to expand a storage pool. However, GETMAIN indicated that sufficient storage in common service area (CSA) to expand the pool was not available.

This abend reason code is issued by the following CSECT: DSNSVBLK

System Action: The agent is abended.
Operator Response: Notify the system programmer.
System Programmer Response: Increase common service area (CSA) size.

Problem Determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. The common service area (CSA) portion of the dump should be printed. Register 4 contains the address of the pool header block (PHB). Register 7 contains the value of the caller’s saved register 14.

At offset 1EF in the SDWA, there is a VRACAN key of ‘3D’ (in HEX), followed by the module name of the Storage Manager invoker.

Collect the following diagnostic items listed in Appendix B: "Problem determination" on page 1051 1, 2, 3, 5.

00E20020

Explanation: The get variable pool function needed to obtain storage (from GETMAIN) to create pool header block (PHB) to represent the pool, but GETMAIN indicated that sufficient storage in private area was not available.

This abend reason code is issued by the following CSECT: DSNSVPL

System Action: The agent is abended.
Operator Response: Notify the system programmer.
System Programmer Response: Increase region size.

Problem Determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. Register 2 contains the ASID, in hexadecimal, of the private area to be printed.

Collect the following diagnostic items listed in Appendix B: "Problem determination" on page 1051 1, 2, 3, 5.

00E20021

Explanation: The get variable pool function needed to obtain storage (from GETMAIN) to create pool header block (PHB) to represent the pool, but GETMAIN indicated that sufficient storage in common service area (CSA) was not available.

This abend reason code is issued by the following CSECT: DSNSVPL

System Action: The agent is abended.
Operator Response: Notify the system programmer.
System Programmer Response: Increase common service area (CSA) size.

Problem Determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. The common service area (CSA) portion of the dump should be printed.

Collect the following diagnostic items listed in Appendix B: "Problem determination" on page 1051 1, 2, 3, 5.

00E20022

Explanation: In order to satisfy an unconditional request, the get fixed block(s) function needed to obtain additional storage to expand a storage pool. However, GETMAIN indicated that sufficient storage in common service area (CSA) was not available.

This abend reason code is issued by the following CSECT: DSNSFBLK

System Action: The agent is abended.
Operator Response: Notify the system programmer.
System Programmer Response: Increase common service area (CSA) size.

Problem Determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. Register 4 contains the address of the pool header block (PHB). Register 7 contains the value of the saved caller’s register 14. The common service area (CSA) portion of the dump should be printed.

At offset 1EF in the SDWA, there is a VRACAN key of ‘3D’ (in HEX), followed by the module name of the Storage Manager invoker.

Collect the following diagnostic items listed in Appendix B: "Problem determination" on page 1051 1, 2, 3, 5.

00E20023

Explanation: The get fixed pool function needed to obtain storage (from GETMAIN) to create pool header block (PHB) to represent the pool, but GETMAIN indicated that sufficient storage in private area was not available.

This abend reason code is issued by the following CSECT: DSNSFPL

System Action: The agent is abended.
Operator Response: Notify the system programmer.
System Programmer Response: Increase region size.

Problem Determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. Register 2 contains the ASID, in hexadecimal, of the private area to be printed.

Collect the following diagnostic items listed in Appendix B: "Problem determination" on page 1051 1, 2, 3, 5.

00E20024

Explanation: To create a pool header block (PHB) that represents the pool, the get fixed pool function requested storage from GETMAIN. However, GETMAIN indicated that insufficient storage existed in the common service area (CSA) to satisfy the request.

This abend reason code is issued by the following CSECT: DSNSFPL

System Action: The agent is abended.
Operator Response: Notify the system programmer.
System Programmer Response: Increase common service area (CSA) size.
Problem Determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. The common service area (CSA) portion of the dump should be printed.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 3, 5.

---

**00E20025**

**Explanation:** The get tracked storage from GETMAIN function was unable to obtain sufficient storage in common service area (CSA) to satisfy an unconditional request.

This abend reason code is issued by the following CSECT: DSNSGMN

**System Action:** The agent is abended.

**System Programmer Response:** Increase common service area (CSA) size.

**Operator Response:** Notify the system programmer.

---

**00E20026**

**Explanation:** Either the allocate stack storage function or the get stack storage function was unable to obtain 4KB of private area storage in subpool 229 for an all-segment table in which a record (representing a stack storage segment) was to be inserted.

This abend reason code is issued by the following CSECT: DSNSVSTK

**System Action:** The invoker of the function is abended.

**Operator Response:** Notify the system programmer.

---

**00E20027**

**Explanation:** The free variable storage function detected that unallocated storage in the block being freed has been modified.

This abend reason code is issued by the following CSECT: DSNSVBK

**System Action:** The agent is abended.

**Operator Response:** Notify the system programmer.

---

**00E20028**

**Explanation:** Either the get stack, deallocate stack or release stack storage function detected that an SKB was invalid or was not represented accurately in the all-segment table.

This abend reason code is issued by the following CSECTs: DSNSVSTK, DSNSTACK

**System Action:** The invoker is abended.

**Operator Response:** Notify the system programmer.

---

**00E20029**

**Explanation:** The free variable storage function detected that although the address of the block being freed was within the specified storage pool it was not the address of the beginning of a variable block.

This abend reason code is issued by the following CSECT: DSNSVBK

**System Action:** The agent is abended.

**Operator Response:** Notify the system programmer.

---

The following general purpose registers (GPRs) contain the indicated diagnostic information:

**GPR Content**

<table>
<thead>
<tr>
<th>GPR</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>address of the pool header block (PHB)</td>
</tr>
<tr>
<td>7</td>
<td>value of the caller's saved register 14</td>
</tr>
<tr>
<td>11</td>
<td>address of the block to be freed</td>
</tr>
</tbody>
</table>

The block to be freed includes two parts: a four word header of control information and the block itself. The second word in the header (offset of 4) is the length of the block.

The third word in the header (offset of 8) is the address of the storage requester. The block is made up of two parts: allocated storage and two words of unallocated storage (padding area of ‘03’).

At offset 1EF in the SDWA, there is a VRACAN key of ‘3D’ (in HEX), followed by the module name of the Storage Manager invoker.

---

**00E20025**

**Explanation:** Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. There is diagnostic information has the address of the parameter list. The common service area (CSA) portion of the dump should be printed.

The trace area storage in subpool 229 for an all-segment table in which a not represented accurately in the all-segment table.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. The trace area storage in subpool 229 for an all-segment table in which a not represented accurately in the all-segment table.

Collect the following diagnostic items listed in [Appendix B, "Problem determination" on page 1051]: 1, 2, 3, 5.
00E2002A

**Explanation:** The SMC Recovery Stack Management function detected that the number of allowed entries in the SMC Recovery Stack has been exceeded, or the structure has been incorrectly modified.

This abend reason code is issued by the following CSECTs:

- DSNSCTL
- DSNSFBK
- DSNSRSUP
- DSNSTACK
- DSNSVBK
- DSNSVSTK

**System Action:** The invoker is abended.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. Register 6 contains the address of the current execution block (EB). This EB has a pointer to the current head stack block (SKB) that is encountering the problem.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2, 3, 5.

---

00E2002B

**Explanation:** This abend code is used to force percolation in the case when an abend is encountered while in Storage Manager code and the Storage Manager has been called recursively.

This abend reason code is issued by the following CSECTs:

- DSNSCTL
- DSNSFBK
- DSNSRSUP
- DSNSTACK
- DSNSVBK
- DSNSVSTK

**Problem Determination:** Refer to the originating abend code.

---

00E2002C

**Explanation:** DB2 detected that the free chain in a data space was damaged.

This abend reason code is issued by the following CSECT: DSNSDSGM

**System Action:** The requested function is not performed. A DB2 dump is requested.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** This is a DB2 internal error. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. If the error was caused by DSPSERV, the reason code from DSPSERV is saved in register 15. If the error was caused by ALESERV, the return code from ALESERV is saved in register 15. Refer to the appropriate MVS publication for the meaning of the return and reason codes.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2, 3, 5.

---

00E2002D

**Explanation:** DB2 is unable to create a data space.

This abend reason code is issued by the following CSECT: DSNSDSGM

**System Action:** The requested function is not performed. A DB2 dump is requested.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** This is a DB2 internal error. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. If the error was caused by DSPSERV, the reason code from DSPSERV is saved in register 15. If the error was caused by ALESERV, the return code from ALESERV is saved in register 15. Refer to the appropriate MVS publication for the meaning of the return and reason codes.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2, 3, 5.

---

00E2002E

**Explanation:** DB2 detected an internal error during the freeing of data space storage.

This abend reason code is issued by the following CSECT: DSNSDSFM

**System Action:** The requested function is not performed. A DB2 dump is requested.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** This is a DB2 internal error. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2, 3, 5.

---

00E2002F

**Explanation:** DB2 detected an internal error during the freeing of data space storage.

This abend reason code is issued by the following CSECT: DSNSDSFM

**System Action:** The requested function is not performed. A DB2 dump is requested.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** This is a DB2 internal error. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2, 3, 5.
X'E3......' Codes

00E30001

Explanation: A service controller internal inconsistency has been encountered. This is probably a DB2 subsystem error.

This abend reason code is issued by the following CSECTs:
- DSNTAAL
- DSNTBAB
- DSNTBAP1
- DSNTBCM1
- DSNTLDU
- DSNTLDW
- DSNTMAC
- DSNTLCU
- DSNTSIN
- DSNTCGET
- DSNTSTR
- DSNTDING
- DSNTLSUS
- DSNTTLM

System Action: A record is written to SYS1.LOGREC, and an SVC dump is requested. The execution unit is abnormally terminated.

Operator Response: Notify the system programmer.

System Programmer Response: This is a DB2 internal error. Obtain a copy of SYS1.LOGREC and the SVC dump. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The service controller has detected an internal inconsistency. The problem can be determined by analyzing the CSECT involved in the abend.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 5.

00E30003

Explanation: An error was returned from a data manager restore operation. This abend is issued to ensure that changes made to the catalog by a failing BIND function are backed out.

This abend reason code is issued by the following CSECTs:
- DSNTBAB
- DSNTBCM1
- DSNTBRB

System Action: The BIND function is abended. All effects of the BIND operation are rolled back. A record is written to SYS1.LOGREC, and an SVC dump is requested.

Operator Response: Notify the system programmer.

System Programmer Response: This is a DB2 internal error. Obtain a copy of SYS1.LOGREC and the SVC dump. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The service controller code, using the data manager restore function, has detected an error while trying to undo the results of a BIND operation. The data manager return and reason code encountered can be found in the CTDMRETC and CTSRCCOD fields of the cursor table pointed to by register 7 in the SDWA.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 5.

00E30004

Explanation: This abend is issued by the service controller initialization module whenever an error return code is received from a database services subcomponent participating in the DB2 startup process. This abend ensures that DB2 is terminated.

This abend reason code is issued by the following CSECT: DSNTSTRT

System Action: The database services shutdown process is initiated after an SVC dump is requested, and a record is written to the SYS1.LOGREC data set. DB2 is abended.

Operator Response: Notify the system programmer.

System Programmer Response: This is a DB2 internal error. Obtain a copy of SYS1.LOGREC and the SVC dump. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: A list of all database services subcomponents whose initialization process has been completed may be obtained from the SVC dump requested by this abend. Register 2 in the SDWA points to a structure that contains the following diagnostic information:

- Module qualifier that identifies the area within DSNTSTRT at which the error was detected. The qualifier should be:
  - A (10) Error found upon return from the SCC startup initialization process
  - B (11) Error found upon return from the SCC IRLM identify process
  - C (12) Error found upon return from the buffer manager initialization process
  - D (13) Error found upon return from the data manager initialization process
  - E (14) Error found upon return from the data space manager initialization process
  - F (15) Error found upon return from the RDS initialization process or LOB Manager initialization process.

- Error return code from the invoked subcomponent
- Error reason code from the invoked subcomponent

Pointers to a structure containing a character string SSCM followed by a 32-bit map representing the following information:

- Bit 0 1 if DB2 has successfully ‘signed on’ to IRLM
- Bit 10 (16) Error found upon return from the SCC startup initialization process
- Bit 1 1 if the buffer manager subcomponent initialization process is completed
- Bit 2 1 if the data manager subcomponent initialization process is completed
- Bit 3 1 if the data space manager subcomponent initialization process is completed
- Bit 4 Not used
- Bit 5 1 if the RDS subcomponent initialization process is completed
- Bit 6 Not applicable
- Bit 7 1 if the SCC initialization process is completed
00E30005

Explanation: A service task could not be created during the database services initialization process. This is probably a DB2 error.

This abend reason code is issued by the following CSECTs: DSNTSTRT, DSNCTST1

System Action: A record is written to SYS1.LOGREC, and an SVC dump is requested. DB2 is abended.

Operator Response: Notify the system programmer.

System Programmer Response: This is possibly a DB2 internal error. Obtain a copy of SYS1.LOGREC and the SVC dump. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Register 2 in the SDWA points to a structure that contains the following diagnostic information:

- **Bit 8**: 1 if the LOB Manager initialization is completed
- **Bit 9**: 31 Not used
- **C (12)**: Pointer to invoked subcomponent's RMFT.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2, 5.

00E30008

Explanation: DSNTSTR2 loaded an incorrect version of the system parameter CSECT DSNTSPRM while DB2 was executing. Message DSNT103I is generated before the abend occurs.

This abend reason code is issued by the following CSECT: DSNTSTR2

System Action: DB2 is terminated.

Operator Response: Notify the system programmer.

System Programmer Response: Restart DB2 with a -START DB2 PARM= command, where the parameter block that follows the 'PARM=' parameter specifies an MVS/XA version of the DB2 subsystem parameters.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2, 5, 9.

00E3000A

Explanation: A bad recovery element was detected by the database services standard ESTAE and FRH recovery routines. This is probably a DB2 subsystem error.

This abend reason code is issued by the following CSECTs:

- DSNB1CRC
- DSNB1CMS
- DSNB1CST
- DSNB1DRN
- DSNB10ST
- DSNB1RST
- DSNB1COM
- DSNB1RPH
- DSNB1RES
- DSNB1RTO
- DSNB1BD
- DSNB1PRO
- DSNI3CUR
- DSNILABR
- DSNLCUR
- DSNLDBP
- DSNLHIS
- DSNPAMS1
- DSNTAAL
- DSNTABA
- DSNTAC1
- DSNTAC2
- DSNTAAL
- DSNTAEA
- DSN3NATU
- DSN18AB
- DSN18CM
- DSN1DMST
- DSNT4STP
- DSNT4CKP
- DSNT4STSTE
- DSNTSTOP
- DSNT5RTST
- DSNT5XCT
- DSNT5XSTB
- DSNTJUDP
- DSN4AHRR
- DSN4GRR
- DSN4XAB
- DSN4XCP
- DSN5XRVB
- DSN5XERD
- DSN51AB
- DSN51CMD
- DSN61DBP
- DSN61MIG

System Action: A record is written to SYS1.LOGREC, and an SVC dump is requested. The execution unit is abended.

Operator Response: Notify the system programmer.

System Programmer Response: This is a DB2 internal error. Obtain a copy of SYS1.LOGREC and the SVC dump. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: This error is detected when a module invokes the macro DSNTSFRR to disconnect a functional recovery element (FRE) from a functional recovery chain to which it is not connected. The name of the module passing the invalid FRE is the module issuing the abend.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2, 5.
00E3000B

Explanation: The database services section (DSN6SPRM) in the DB2 initialization parameter module (DSNZPAM) does not exist.

This abend reason code is issued by the following CSECT: DSNTSTR2

System Action: A record is written to SYS1.LOGREC, and an SVC dump is requested. DB2 is abended.

Operator Response: Notify the system programmer.

System Programmer Response: This is probably an installation error. Obtain a copy of SYS1.LOGREC and the SVC dump. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Register 2 in the SDWA points to a structure that contains the following diagnostic information:

<table>
<thead>
<tr>
<th>Register</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 (0)</td>
<td>Should equal X'1'</td>
</tr>
<tr>
<td>2 (2)</td>
<td>Return code from the get descriptor function of the system parameter manager (SPM) subcomponent of DB2</td>
</tr>
<tr>
<td>4 (4)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>8 (8)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>C (12)</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

First, ensure that DSNZPAM was installed correctly. Then, using the return code from SPM, determine why the descriptor is not available.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2, 3, 5.

00E3000C

Explanation: A database services TCB service task that cannot be reinstated has been abnormally terminated. Entries in SYS1.LOGREC that precede this entry indicate the source of the error.

This abend reason code is issued by the following CSECT: DSNTSREI

System Action: The executing unit is abended. A record is written to SYS1.LOGREC.

Operator Response: Notify the system programmer.

System Programmer Response: Notify the system programmer.

Problem Determination: Obtain a copy of SYS1.LOGREC, and determine the cause of the problem from the information that precedes this entry.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2, 3, 5.

00E3000D

Explanation: A failure occurred and was detected while an ESTAE functional recovery was being established.

This abend reason code is issued by the following CSECTs:

<table>
<thead>
<tr>
<th>CSECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>DSNBICST</td>
</tr>
<tr>
<td>DSNLDBP</td>
</tr>
<tr>
<td>DSNTSTRT</td>
</tr>
</tbody>
</table>

System Action: The executing unit is abended. A record is written to SYS1.LOGREC.

Operator Response: Notify the system programmer.

System Programmer Response: Obtain a copy of SYS1.LOGREC, and determine the cause of the problem from the information that precedes this entry.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2, 3, 5.

00E3000F

Explanation: The database services functional recovery load module, DSNTF, has an unrecognizable entry point.

This abend reason code is issued by the following CSECT: DSNTTRC

System Action: A record is written to SYS1.LOGREC, and an SVC dump is requested. DB2 is abended.

Operator Response: Notify the system programmer.

System Programmer Response: Notify the system programmer.

Problem Determination: Obtain a copy of SYS1.LOGREC, and determine the cause of the problem from the information that precedes this entry.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2, 3, 5.
Explanation: The database services initialization process could not read the DB2 bootstrap data set (BSDS).

This abend reason code is issued by the following CSECT: DSNTST2

System Action: A record is written to SYS1.LOGREC, and an SVC dump is requested. DB2 is abended.

Operator Response: Notify the system programmer.

System Programmer Response: This is probably an installation error. Obtain a copy of SYS1.LOGREC and the SVC dump. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: This error can usually be traced to a VSAM error occurring while reading the BSDS. Before examining the dump, examine the operator console log and SYSLOG to determine if VSAM has encountered any errors on the BSDS.

Register 2 in the SDWA points to a structure that contains the following diagnostic information:

<table>
<thead>
<tr>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 (0)</td>
<td>Should equal 'X'2'</td>
</tr>
<tr>
<td>2 (2)</td>
<td>Return code from a BSDS read request function of the recovery log manager (RLM) subcomponent</td>
</tr>
<tr>
<td>4 (4)</td>
<td>Abend reason code from a BSDS read request function of the recovery log manager (RLM) subcomponent</td>
</tr>
<tr>
<td>8 (8)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>C (12)</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2, 3, 5, 16.

Explanation: The value specified in the DSN6SYSP CSECT to define reserve storage is either negative or zero.

This abend reason code is issued by the following CSECT: DSNTST2

System Action: DB2 is terminated.

Operator Response: Notify the system programmer.

System Programmer Response: Reassemble DSN6SPRM and relink-edit the DSNZPARM load module. This is done by resubmitting the installation job stream, DSNTIJUZ, that built the load module named in the -START DB2 command ‘PARM=’ parameter.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2, 3, 5, 9.

Explanation: A plan could not be executed because the system from which you are attempting to run is disabled or unknown. The system type might be unknown if the attach library that you are using is from a previous release of DB2 that does not support the ENABLE and DISABLE options of the bind operation.

This abend reason code is issued by the following CSECT: DSNTAAL

System Action: The plan is not allocated.

System Programmer Response: Refer to the SYSIBM.SYSPLSYSTEM table to determine the systems from which the plan can be executed, or correct the attach library.

Explanation: A processing error has occurred during authorization checking.

This abend reason code is issued by the following CSECT: DSNTAXAC

System Action: The request to allocate a plan to the authorization ID is denied.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 5.
00E30034
Explanation: The authorization ID associated with this connection is not authorized to use the specified plan name or the specified plan name does not exist.
This abend reason code is issued by the following CSECT: DSNTAUTH
System Action: The request to allocate a plan to the authorization ID is denied.
User Response: Verify that the correct plan name was specified. If the plan exists, then authority to execute the plan must be granted.

00E30035
Explanation: A processing error has occurred during authorization checking.
This abend reason code is issued by the following CSECT: DSNTAUTH
System Action: The request to allocate a plan to the authorization ID is denied.
Operator Response: Notify the system programmer.
System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Problem Determination: Collect the diagnostic items listed in Appendix B. "Problem determination" on page 1051 1, 5.

00E30036
Explanation: An internal logic error occurred while invoking a distributed transaction manager function.
This abend reason code is issued by the following CSECTs: DSNTDINQ DSNTLSUS DSNTCGET
System Action: DB2 writes a SYS1.LOGREC record and requests a SVC dump.
User Response: Notify the system programmer.
Operator Response: Collect the SYS1.LOGREC listing and the SVC dump.
System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Problem Determination: At the time of the abend, the registers contain the following information:
Start the diagnostic collection procedure using the diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 2, 5.

00E30040
Explanation: An internal logic error occurred while the catalog access function was being invoked.
This abend reason code is issued by the following CSECT: DSNTCSRC
System Action: The START RLIMIT command fails. The governing status prior to issuing this command continues unchanged.
Operator Response: Notify the system programmer.
System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Problem Determination: At the time of the abend, the registers contain the following information:
Start the diagnostic collection procedure using the diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 2, 5.

00E30041
Explanation: An internal error occurred when trying to obtain a limit from the resource limit specification table.
This abend reason code is issued by the following CSECT: DSNTCGET
System Action: A record is written to SYST1.LOGREC, and an SVC dump is requested. The requested execution unit is abended.
Operator Response: Notify the system programmer.
System Programmer Response: Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Problem Determination: At the time of the abend, the registers contain the following information:
Start the diagnostic collection procedure using the diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 2, 5.

00E30065
Explanation: The service controller's BIND processor detected an error in the user's database request module (DBRM) while building the SYSDBRM record.
This abend reason code is issued by the following CSECT: DSNTBCM1
System Action: The BIND command fails.
User Response: An invalid field in the DBRM was found while processing the BIND command. The DBRM might be bad. Rebuild the DBRM and reissue the BIND command.
Operator Response: Notify the system programmer.
System Programmer Response: If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 3, 5.

00E30066

Explanation: The service controller’s BIND processor has detected an invalid release dependency mark in the cursor table.

This abend reason code is issued by the following CSECT: DSNTBBP

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 3, 5.

00E30067

Explanation: The BIND process program abended while attempting to use a BIND parameter. This usually indicates that the parameter list provided to the service controller BIND function is invalid (such as invalid addresses or incorrect key).

System Action: A record is written to SYS1.LOGREC, and an SVC dump is requested. The BIND subcommand is terminated.

User Response: Notify the system programmer.

System Programmer Response: Obtain a copy of SYS1.LOGREC and the SVC dump.

If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem Determination: Register 2 contains an indication of the type of parameter as follows:

- 000000101: Input parameter list.
- 000000102: Communication information block (CIB).
- 000000103: Invalid BIND subcommand name. Registers 3 and 4 contain the invalid subcommand name.
- 000000104: Subcommand information block (SIB).
- 000000201: DBRM member name list.
- 000000202: Plan-ID list.
- 000000203: Message block in user storage. Other register contents are as follows:

R3 R4

< 4 Simple reference
R8 = zero

> 0

MVCL R8 = From address
R4 = move length
To and from lengths are equal.

0

GETMAIN for user storage failed
R4 = storage length required
R8 = GETM
To fix this problem, increase your region size.

< 0

FREEMAIN of user storage failed
R4 = length of storage of free
R8 = address of storage to free

00000204 Message block in user storage. R8 = Message block address.

Except as indicated above, the information in the other registers is as follows:

- R3 Parameter address
- R4 Parameter length
- R5 Parameter storage key
- R8 Input parameter list address

00000205 Package-list name list.
00000206 ENABLE/DISABLE system list.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 5, 20.

This abend reason code is issued by the following CSECTs:

DSNTBAP DSNTBAP1 DSNTBAP2

00E30068

Explanation: A function invoked by a BIND subcommand has returned an unexpected error.

This abend reason code is issued by the following CSECTs:

DSNTAAL DSNTBAB DSNTBAP1 DSNTBBP DSNTBCM1 DSNTBFR DSNTBAP DSNTBFR2 DSNTBCM3 DSNTBAP

System Action: A record is written to SYS1.LOGREC, and an SVC dump is requested. The BIND subcommand is terminated.

User Response: Notify the system programmer.

System Programmer Response: This is an internal DB2 error. Obtain a copy of SYS1.LOGREC and the SVC dump. Refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem Determination: The service controller code has detected an internal inconsistency. The problem can be determined by analyzing the CSECT involved in the abend.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 5, 20.

00E30069

Explanation: An attempt to allocate a cursor table (CT) failed.

This abend reason code is issued by the following CSECTs:

DSNTXSTB DSNTDMST DSNTDSTP
System Action: A record is written to SYS1.LOGREC, and an SVC dump is requested. DB2 is abended.

Operator Response: Notify the system programmer.

System Programmer Response: This is an internal DB2 error. Obtain a copy of SYS1.LOGREC and the SVC dump. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The service controller code has detected an internal inconsistency. The problem can be determined by analyzing the CSECT involved in the abend.

Collect the following diagnostic items listed in Appendix B on page 1051: 1, 2, 5.

00E30070

Explanation: An attempt was made to use the Internal Resource Lock Manager (IRLM) facilities, but the IRLM was not available. Either the IRLM had not been started by the operator, or the IRLM has encountered a problem causing it to terminate abnormally.

This abend reason code is issued by the following CSECTs:
- DSNTAAL
- DSNTBAB
- DSNTBCC1
- DSNTBFR
- DSNTBRB
- DSNTEFSF
- DSNTSGST
- DSNTSINI

System Action: A record is written to SYS1.LOGREC, and an SVC dump is requested. The requesting execution unit is abended.

User Response: Notify the system programmer.

Operator Response: The IRLM should be started before the DB2 subsystem is started. If this does not resolve the problem (that is, if the IRLM actually was started before DB2 was started) notify the system programmer.

System Programmer Response: This is probably not a DB2 problem. Obtain a copy of SYS1.LOGREC and the SVC dump. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: If IRLM abended, and if you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem. Otherwise, ensure that the IRLM is started before the -START DB2 command is issued.

Collect the following diagnostic items listed in Appendix B on page 1051: 1, 2, 5, 9, 18.

00E30071

Explanation: Either DB2 terminated without successfully signing off from IRLM, or another subsystem with the same SSNAME is still connected. This abend reason code accompanies message DSNT380I.

This abend reason code is issued by the following CSECT: DSNT380I

System Action: A record is written to SYS1.LOGREC, and an SVC dump is requested. DB2 is abended.

Operator Response: Determine if another DB2 subsystem is active. If another subsystem is not active, and IMS is not sharing the same IRLM, cancel IRLM prior to starting DB2. Regardless, notify the system programmer.

System Programmer Response: Obtain a copy of SYS1.LOGREC and the SVC dump. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

If the error was caused by a previously unsuccessful QUIT from the IRLM, manually stop IRLM. If IMS is using the same IRLM, refer to the IMS documentation to determine the effect of IRLM terminating while IMS is connected.

If you are running multiple versions of DB2, ensure that the SSNAME specified by the DSNNSPRM macro during the installation of the member DSNZPARM is not the same as the SSNAME in another version of DB2.

Problem Determination: A previously unsuccessful sign-off from the IRLM is documented by an abend of X'00E30075' during the previous termination of DB2.

Collect the following diagnostic items listed in Appendix B on page 1051: 1, 2, 3, 5, 9, 18.

00E30072

Explanation: An error was encountered during an IRLM lock query request.

This abend reason code is issued by the following CSECTs: DSNTLGRAY, DSNTLQRY

System Action: A record is written to SYS1.LOGREC, and an SVC dump is requested. The execution unit is terminated.

Operator Response: Notify the system programmer.

System Programmer Response: This is a DB2 internal error. Obtain a copy of SYS1.LOGREC and the SVC dump. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: At the time of the abend, the registers contains the following information:
- R2 Address of the lock request RLPL
- R4 Address of the IRLM query request RLPL
- R5 Address of the IRLM query RLQD
- R7 CT address

Refer to Section 5, IRLM Messages and Codes on page 1009 for information identifying IRLM return and reason codes.

Collect the following diagnostic items listed in Appendix B on page 1051: 1, 2, 5, 18.

00E30073

Explanation: An unrecoverable system error occurred while processing a LOCK or UNLOCK request.

This abend reason code is issued by the following CSECTs: DSNTAAL, DSNTBAB, DSNTBCC1, DSNTBFR

System Action: A record is written to SYS1.LOGREC, and an SVC dump is requested. The requested execution unit is abended.

Operator Response: Notify the system programmer.

System Programmer Response: This is a DB2 internal error. Obtain a copy of SYS1.LOGREC and the SVC dump. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The service controller (SC) subcomponent has detected an internal inconsistency. The problem
can be determined by analyzing the CSECT involved in the abend.

Collect the following diagnostic items listed in Appendix B.

Problem determination on page 1051 1, 2, 5, 18.

00E30074

Explanation: A global out-of-storage condition was encountered by the Internal Resource Lock Manager (IRLM) during the processing of a LOCK or UNLOCK request.

This abend reason code is issued by the following CSECTs:

DSNTAAL DSNTBRR DSNTBAB DSNTBMC1 DSNTBFR

System Action: A record is written to SYS1.LOGREC, and an SVC dump is requested. The requesting execution unit is abended.

Operator Response: Notify the system programmer.

System Programmer Response: This is probably not a DB2 problem. Obtain a copy of SYS1.LOGREC and the SVC dump. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The name of the module issuing the abend is recorded in the SYS1.LOGREC entry. It is also recorded in the SVC dump as the CSECT involved in the abend. A parameter in the IRLM procedure specifies the amount of the common service area (CSA) to be used by IRLM. Do one of the following:

- Increase the CSA limit.
- Use a local IRLM (that is, an IRLM option that causes IRLM to operate from another address space).
- Using IRLM lock tracing, determine what application is acquiring so many locks that it causes the IRLM CSA limit to be exceeded.

Collect the following diagnostic items listed in Appendix B.

Problem determination on page 1051 1, 2, 5.

00E30075

Explanation: During the normal sign-off from IRLM or during the abnormal shutdown of DB2, an AUTO-STOP of IRLM using SVC 34 abnormally terminated. Message DSNT303I is issued.

This abend reason code is issued by the following CSECT: DSNTLOUI

System Action: A record is written to SYS1.LOGREC, and an SVC dump is requested. DB2 is abended.

Operator Response: Notify the system programmer.

System Programmer Response: This is probably a DB2 internal error. Obtain a copy of SYS1.LOGREC and the SVC dump. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The name of the CSECT issuing the abend is found in both the SYS1.LOGREC and the SVC dump. Register 2 contains the SVC return code.

Collect the following diagnostic items listed in Appendix B.

Problem determination on page 1051 1, 2, 3, 5, 36.

00E30076

Explanation: An attempt to sign-off from IRLM failed.

This abend reason code is issued by the following CSECT: DSNTLOUI

System Action: A record is written to SYS1.LOGREC, and an SVC dump is requested. DB2 is abended.

Operator Response: Notify the system programmer.

System Programmer Response: This is probably an internal DB2 error. Obtain a copy of SYS1.LOGREC and the SVC dump. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The service controller subcomponent has detected an internal inconsistency. The problem can be determined by analyzing the CSECT involved in the abend. This CSECT is found in both the SYS1.LOGREC and the SVC dump.

The request parameter list (RLPL) used during the sign-off process resides in the IRLM interface manager’s communication block (DSNTLMC) from ACOM.

Collect the following diagnostic items listed in Appendix B.

Problem determination on page 1051 1, 2, 5.

00E30077

Explanation: A database command processor encountered an error when attempting to create a cursor block (CUB) on a DB2 catalog table.

This abend reason code is issued by the following CSECTs:

DSNTDINQ DSNTDMST DSNTDDIS

System Action: An error was detected during the generation of messages to satisfy a DATABASE command. A DSNT305I message appears on the console of the requester, with the RC parameter of 12 and a REASON parameter of X’00E30089’.

Operator Response: Notify the system programmer.

System Programmer Response: This is probably an internal DB2 error. Obtain a copy of SYS1.LOGREC and the SVC dump. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Diagnostic information may be found in the Display Command Communication Area, whose address is found in register 8, and by the Display Command subcode in register 2.

00E30078

Explanation: IRLM called the service controller IRLM interface status exit with register 0 equal to 1 in order to notify DB2 that IRLM is terminating. This is not a DB2 subsystem error.

This abend reason code is issued by the following CSECT: DSNTLSTA

System Action: DB2 is abended when IRLM is terminated before DB2 is terminated. An entry is written to SYS1.LOGREC.
**00E30079**

**Explanation:** An error was encountered on return from the Internal Resource Lock Manager (IRLM) IDENTIFY function. This abend reason code is issued by the following CSECT: DSNTLIDE

**System Action:** A record is written to SYS1.LOGREC, and an SVC dump is requested. DB2 is abended.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** This may be an internal DB2 error or an operator procedure problem. Obtain a copy of SYS1.LOGREC and the SVC dump. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** In the SVC dump, register 2 contains the SVC return code and register 3 contains the reason code from the identify function to the IRLM. Examine the reason code in register 3, either from the dump or system console log. A reason code of X’0081’ indicates that the IRLM is unavailable, that is, IRLM is not started and the autostart is not requested by parameters in DSNZPARM.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 5.

---

**00E3007A**

**Explanation:** DB2 encountered an IRLM request error indicating that IRLM is not available to take requests.

This abend reason code is issued by the following CSECT: DSNTLCAU

**System Action:** DB2 terminates because it cannot complete an IRLM request.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Look for the IRLM error code or messages to find out why IRLM is not available to take the DB2 request. Most likely, IRLM is terminating at the same time.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:**

Refer to the IRLM problem determination process.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 5.

---

**00E30080**

**Explanation:** An attempt was made to start the Internal Resource Lock Manager (IRLM) using the MGCR (SVC 34), and a nonzero return code was returned.

This abend reason code is issued by the following CSECT: DSNTLIDE

**System Action:** A record is written to SYS1.LOGREC, and an SVC dump is requested. DB2 is abended.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Examine the SVC return code to determine whether this is a system problem or a DB2 internal problem. Obtain a copy of SYS1.LOGREC and the SVC dump. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** Register 2 contains the SVC return code.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 5, 36.

---

**00E30081**

**Explanation:** An attempt was made to start the Internal Resource Lock Manager (IRLM). IRLM did not come up in the time limit specified to DB2.

This abend reason code is issued by the following CSECT: DSNTLIDE

**System Action:** A record is written to SYS1.LOGREC, and an SVC dump is requested. DB2 is abended.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** This problem can be circumvented. To do this, either specify a longer time limit in the IRLMSWT parameter of the DSN6SPRM assembler macro in the DSNTIJUZ job stream, or update the IRLM system wait time parameter in the DB2 installation update panel. You must also specify all other parameters contained in this version of the CSECT. Then resubmit the installation job DSNTIJUZ with the link-edit SYSIN file NAME parameter that matches the -START DB2 ‘PARM=’ parameter. Refer to Section 2 of DB2 Installation Guide for additional information.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 5, 9, 36.

---

**00E30082**

**Explanation:** IRLM discovered a bad request parameter list (RLPL). This may occur if the RLPL storage is overlaid while an agent is suspended.

This abend reason code is issued by the following CSECT: DSNTLSUS

**System Action:** The execution unit is abended.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** This is a DB2 internal error. Obtain a copy of SYS1.LOGREC and the SVC dump. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** An IRLM request was made that IRLM could not honor immediately. IRLM called DSNTLSUS to suspend the request. While waiting, the request parameter list (RLPL) was changed and is no longer valid. Someone may be reusing the RLPL, or the storage may have been overlaid.

Register 2 contains a pointer to the RLPL.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 5.
00E30083

Explanation: This agent has been selected as the victim of a deadlock or timeout.

This reason code is not used in abends.

This reason code is issued by the following CSECTs:
- DSNTAAL
- DSNTBAB
- DSNTBCMI
- DSNTBFR

00E30084

Explanation: Message DSNT305I appears on the console of the requester with RC=8 and REASON=E'00E30084'. This message tells the requester that an error was detected while building the database command display. Other entries in the SYS1.LOGREC help to identify the source of the error.

This abend reason code is issued by the following CSECTs:
- DSNTDMSG
- DSNTDMUL

System Action: This is a DB2 subsystem error. No SVC dump is requested because a previous dump of the failing subcomponent is expected.

Operator Response: Notify the system programmer.

System Programmer Response: Obtain a copy of SYS1.LOGREC and the SVC dump. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

00E30085

Explanation: An error was indicated by the RDS Authorization function. This is an internal DB2 error.

This abend reason code is issued by the following CSECT: DSNTDMI

System Action: A record is written to SYS1.LOGREC, and an SVC dump is requested. The command is abandoned after displaying a DSNT305I message with an RC parameter of 12 and a REASON parameter of X'00E30089'.

Operator Response: Notify the system programmer.

System Programmer Response: This is an internal DB2 error. Obtain a copy of SYS1.LOGREC and the SVC dump. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The error return code address of the Display Command Communication Area is found in register 7.

00E30086

Explanation: An error was indicated by the data manager (DM) subcomponent. This is probably an internal DB2 error.

This abend reason code is issued by the following CSECTs: DSNTDMI, DSNTDCST

System Action: A record is written to SYS1.LOGREC, and an SVC dump is requested. The command is abandoned after displaying a DSNT305I message with an RC parameter of 12 and a REASON parameter of X'00E30089'.

Operator Response: Notify the system programmer.

System Programmer Response: This is probably an internal DB2 error. Obtain a copy of SYS1.LOGREC and the SVC dump. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The error return code of the data manager may be found in the cursor table (CT), the address of which is found in register 7.

00E30088

Explanation: This code is used in the REASON parameter of the DSNT305I database command message to inform the requester that the execution unit supporting the database command processor has terminated. Other entries in the SYS1.LOGREC identify the source of the error.

This abend reason code is issued by the following CSECT: DSNTDMSG

System Action: A DSNT305I message appears on the console of the requester, with an RC parameter of 12 and a REASON parameter of X'00E30089'. This is probably a DB2 subsystem error. No SVC dump is requested because a prior dump of the failing subcomponent is expected.

Operator Response: Notify the system programmer.

System Programmer Response: See the SYS1.LOGREC for prior failure.

00E30090

Explanation: A service controller internal inconsistency has been encountered during message generation.

This abend code is issued by the following CSECTs: DSNTDMSG, DSNTDMUL

System Action: A record is written to SYS1.LOGREC, and an SVC dump is requested. The execution unit is abandoned.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: At the time of the abend, register 2 contains the message number that was to be generated.

Collect the following diagnostic items listed in Appendix B.

00E30091

Explanation: A failure was detected during the retry process of DB2 recovery.

System Action: DB2 is abandoned after a record is written to SYS1.LOGREC and an SVC dump is requested.

Operator Response: Notify the system programmer.

System Programmer Response: This is probably an internal DB2 error. Obtain a copy of SYS1.LOGREC and the an SVC dump. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: This abend is issued by DSNTFRCV of the service controller (SC) subcomponent.

Collect the following diagnostic items listed in Appendix B.
00E30092

Explanation: A retry recovery failure has been detected. This is a critical error.

This abend reason code is issued by the following CSECT: DSNTFRCV

System Action: DB2 is abended. This is probably a DB2 subsystem error.

Operator Response: Notify the system programmer.

System Programmer Response: Obtain a copy of the SYS1.LOGREC and the SVC dump. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The service controller recovery module has detected an internal inconsistency. The problem can be determined by analyzing the CSECT involved in the abend. The name of this CSECT is found in both the SYS1.LOGREC and the SVC dump.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 2, 3, 5.

00E30095

Explanation: DB2 is unable to acquire a modify lock because of an incompatible retained lock held by one or more other DB2 subsystems in the DB2 data sharing group. Retained locks are locks that persist across DB2 abnormal terminations.

System Action: SQLCODE -904 is returned to the user. This reason code and the resource name are also returned.

System Programmer Response: Use the DISPLAY DATABASE command to display the DB2 member names owning the retained locks. You must restart those subsystems to remove the 'resource unavailable' condition.

Problem Determination: This reason code is issued by the following CSECTs:

- DSNTAAL
- DSNTBAS2
- DSNTBAS3
- DSNTBRR
- DSNTBFR
- DSNTBA8
- DSNTBA9
- DSNTBC1
- DSNTBCM1

00E30096

Explanation: DB2 is unable to acquire a modify lock. Lock negotiation failed because another DB2 subsystem in the DB2 data sharing group is abnormally terminating.

This abend reason code is issued by the following CSECTs: DSNTBFR

System Action: A 'resource unavailable' condition is returned to the user. This reason code, the resource type, and the resource name are also returned.

User Response: Resubmit the request.

System Programmer Response: Determine why the other DB2 member abnormally terminated. The 'resource unavailable' condition will be cleared when that DB2 member has completely terminated.

Problem Determination: Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

00E3009E

Explanation: The plan depends on new facilities of the release from which fall back has occurred.

This abend reason code is issued by the following CSECT: DSNTAAL

System Action: The allocation for the user failed.

User Response: Do not use this plan until your DB2 subsystem is remigrated to the newer release.

System Programmer Response: Warn the user community NOT to run this plan until you have remigrated to the newer release.

00E30100

Explanation: This reason code can be returned in the following cases:

- A parallel task running on a DB2 terminates abnormally.
- An assisting DB2 terminates abnormally.

This reason code is issued by the following CSECTs: DSNTTCC, DSNTTREB

System Action: The member name where the failure occurred is returned to the application as the resource name in SQLCODE -904. In a non-data-sharing environment, the member name is blank, and the failure occurs on the local DB2.

Operator Response: Enter DISPLAY GROUP from an active DB2 to see if a DB2 subsystem is down. Restart the failed DB2 subsystem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 5.

00E30101

Explanation: The result of issuing a SETFRR macro indicates that this FRR is not the top FRR.

This abend reason code is issued by the following CSECT: DSNTAC1

System Action: A record is written to SYS1.LOGREC. An SVC dump is requested.

System Programmer Response: This is probably a DB2 internal error. Obtain a copy of SYS1.LOGREC and the SVC dump. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 2, 5.

00E30104

Explanation: This reason code is used by the service controller (SC) subcomponent to respond NO on a prepare-to-commit notification.

This abend reason code is issued by the following CSECT: DSNTAC1

System Action: If the service controller indicates that DB2 cannot commit to perform the work requested by the application since the last commit point, it responds NO on the prepare-to-commit notification (COMMIT1). This forces the
commit to be changed to an abort, causing the work performed by the application since the last commit point to be backed out.

**00E30105**

**Explanation:** IRLM was informed of a link failure to a coupling facility that contains a lock table being actively used by this data sharing group.

**System Action:** The DB2 subsystem is terminated with this reason code.

**System Programmer Response:** See IRLM message DXRxxxxE to determine the root cause of the failure and the appropriate corrective action.

**Problem Determination:** This abend reason code is issued by the following CSECT: DSNTLSTA

---

**00E30301**

**Explanation:** You have attempted to execute a plan that does not exist. This reason code is used by the automatic BIND function to indicate that no record exists in SYSIBM.SYSPLAN for the plan-ID you are attempting to run, so plan allocation fails.

This reason code is issued by the following CSECT: DSNTBAB

**System Action:** The plan is not executed.

**User Response:** Determine if the object name was correctly specified. If so, ensure that the plan exists (by selecting from SYSIBM.SYSPLAN).

---

**00E30302**

**Explanation:** This reason code is used by the automatic BIND function to indicate that the plan currently being allocated is not operational. The automatic BIND for the plan failed because the plan was dependent on something that was altered or dropped. An unavailable database might also cause this problem.

This reason code is issued by the following CSECT: DSNTBAB

**System Action:** The autobind fails, and the plan cannot be allocated.

**System Programmer Response:** Determine what made the plan not operational. Make sure the required database is available. Issue a REBIND subcommand for the plan.

---

**00E30303**

**Explanation:** You have attempted to execute a package that does not exist. This reason code is used by the automatic package BIND function to indicate that no record exists in SYSIBM.SYSPACKAGE for the package-ID you are attempting to run, so package allocation fails.

This abend reason code is issued by the following CSECT: DSNTBAB2

**System Action:** Package allocation fails.

**User Response:** Determine if the object name was correctly specified. If so, ensure that the package exists (by selecting from SYSIBM.SYSPACKAGE).

---

**00E30305**

**Explanation:** This reason code is used by the automatic BIND function to indicate that the package currently being allocated is not operational. That upon which the package was dependent has been altered or dropped, causing the automatic BIND for the package to fail.

This abend reason code is issued by the following CSECT: DSNTBAB2

**System Action:** Agent allocation fails or DROP package fails.

**System Programmer Response:** Determine what has made the package not operational. Issue a REBIND subcommand for the package.

---

**00E30306**

**Explanation:** This reason code is returned when the automatic bind for plan is disabled. The automatic bind is disabled through the installation process.

This abend reason code is issued by the following CSECTs: DSNTAAL, DSNXABA, DSNXEAAL

**System Action:** The plan is not automatically bound.

**System Programmer Response:** Rebind the plan prior to execution.

---

**00E30402**

**Explanation:** This subcode is found in register 2 to clarify abend reason code X'00E30077'. See X'00E30077' for more information.

This reason code is issued by the following CSECT: DSNTDINQ

---

**00E30405**

**Explanation:** This subcode is found in register 2 to clarify abend reason code X'00E30077'. See X'00E30077' for more information.

This reason code is issued by the following CSECT: DSNTDINQ

---

**00E30406**

**Explanation:** This subcode is found in register 2 to clarify abend reason code X'00E30077'. See X'00E30077' for more information.

This reason code is issued by the following CSECT: DSNTDMST

---

**00E30407**

**Explanation:** This subcode is found in register 2 to clarify abend reason code X'00E30077'. See X'00E30077' for more information.

This reason code is issued by the following CSECT: DSNTDDIS
00E30700 Explanation: A resource limit as determined from the active resource limit specification table has been exceeded. The SQL statement has been terminated with an SQLCODE -905.

This abend reason code is issued by the following CSECTs: DSNB1GET, DSNXSRID

System Action: The current SQL statement contains an SQLCODE -905.

User Response: See the text for the SQLCODE -905. It will specify the resource limit that was exceeded. The SQLCODE -905 text will also include the name of the resource limit specification table that was used to derive the limit. Determine why the limit was exceeded.

Operator Response: Notify the system programmer.

System Programmer Response: An SQL statement used too much resource space. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” or page 1051 1, 5.

00E30800 Explanation: An attempt was made to identify to an IRLM that does not support the level of function DB2 needs. Message DSNT803I accompanies this abend reason code.

System Action: Message DSNT803I is issued to the console, and DB2 terminates abnormally with this reason code. A record is written to SYS1.LOGREC. No SVC dump is taken.

System Programmer Response: DB2 Version 6 requires IRLM Version 2.1, at a maintenance lever that includes APAR PQ15290 Version 6 will not run with any earlier release of IRLM or with IRLM Version 2.1 at a lower level of maintenance.

Ensure that the STEPLIB statement in your IRLM startup procedure is referencing the correct IRLM code library and that the appropriate level of maintenance has been applied.

Problem Determination:

00E30802 Explanation: DB2 was not able to identify to IRLM because another subsystem already identified to IRLM. Message DSNT811E accompanies this abend reason code.

System Action: Message DSNT811E is issued to the console. DB2 terminates abnormally with this reason code. A record is written to SYS1.LOGREC. No SVC dump is taken.

System Programmer Response: IRLM Version 2.1 enforces a one to one (1:1) mapping between IRLM and DB2. Multiple DBMS subsystems can no longer use the same IRLM. Ensure that:

- Each DB2 subsystem is associated with its own IRLM subsystem.
- The correct IRLM procedure name and subsystem name are specified in the DB2 system parameters.

Problem Determination: This reason code is issued by the following CSECT: DSNTLIDE

00E30803 Explanation: An error occurred in one of the DB2-supplied exits to IRLM. This abend reason code is issued only in a DB2 sharing data environment and indicates an internal error in DB2 or IRLM.

System Action: A record is written to SYS1.LOGREC and an SVC dump is initiated. DB2 terminates abnormally.

Problem Determination: Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

This abend reason code is issued by the following CSECT: DSNTPNE

00E30805 Explanation: DB2 could not activate one of the exits used with IRLM for data sharing. This is a DB2 internal error.

System Action: A record is written to SYS1.LOGREC and an SVC dump is initiated. DB2 terminates abnormally.

Problem Determination: Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

This reason code is issued by the following CSECT: DSNTRSTE

00E30806 Explanation: IRLM could not successfully join its IRLM data sharing group. Message DSNT800I accompanies this abend reason code.

System Action: Message DSNT800I is issued to the console, and DB2 abnormally terminates with this reason code. A record is written to SYS1.LOGREC. No SVC dump is taken.

System Programmer Response: Some possible reasons why IRLM could not join its data sharing group are:

- The lock structure is not properly defined in the active MVS CFRM administrative policy. The lock structure name is a concatenation of the DB2 data sharing group name and the string ‘LOCK1’, separated by an underscore (_). For example, if the DB2 data sharing group name is DSNCAT, DSNCAT_LOCK1 would be the lock structure name.

Ensure that the lock structure is properly defined in the active MVS CFRM policy. The name of the lock structure that IRLM attempted to access is given in message DSNT800I. IRLM issues message DXR138E to indicate that the lock structure definition could not be accessed in the active MVS CFRM policy.

- IRLM could not connect the lock structure. The reason for the connect failure is given in IRLM message DXR135E.

- IRLM could not join its data sharing group. The reason for the join failure is given in IRLM message DXR134E.

- IRLM joined the wrong group. The set of IRLMs that are connected to a given lock structure must all be members of the same group.

Ensure that the GROUP parameter is correctly specified in the IRLM startup procedure. If you give an incorrect group name, IRLM connects the lock structure, and then times out waiting for responses from other connectors. IRLM issues message DXR133I for the timeout.

DB2 Codes  861
Problem Determination: This reason code is issued by the following CSECT: DSNTLIDE

00E30807

Explanation: DB2 failed on the IRLM Identify request because no lock structure name was specified. Message DSNT810E accompanies this abend reason code.

System Action: Message DSNT810E is issued to the console, and DB2 terminates abnormally with this reason code. A record is written to SYS1.LOGREC. No SVC dump is taken.

System Programmer Response: This condition occurs if you are not running DB2 in data sharing mode, but the associated IRLM is running with global scope (SCOPE=GLOBAL in the IRLM startup procedure). If you are not running DB2 in data sharing mode, ensure that the associated IRLM startup procedure specifies SCOPE=LOCAL. Conversely, if you are running DB2 in data sharing mode, ensure that the associated IRLM startup procedure specifies SCOPE=GLOBAL.

Problem Determination: This reason code is issued by the following CSECT: DSNTLIDE

00E30809

Explanation: DB2 issued an IRLM PURGE request to purge retained locks, but the PURGE request was not successful. This abend reason code accompanies message DSNT807I.

System Action: An SVC dump is initiated. The DB2 restart process is terminated.

System Programmer Response: The IRLM return and reason codes are in the SYS1.LOGREC record.

Problem Determination: This reason code is issued by the following CSECT: DSNTRSTE

00E30810

Explanation: DB2 failed on the IRLM Identify request because IRLM did not return the lock structure version ID. Message DSNT809I accompanies this abend reason code.

System Action: Message DSNT809I is issued to the console, and DB2 abnormally terminates with this reason code. A record is written to SYS1.LOGREC. No SVC dump is taken.

System Programmer Response: This condition occurs if you are running DB2 in data sharing mode, but the associated IRLM is running with local scope (SCOPE=LOCAL in the IRLM startup procedure). If you are running DB2 in data sharing mode, ensure that the associated IRLM startup procedure specifies SCOPE=GLOBAL. Conversely, if you are not running DB2 in data sharing mode, ensure that the associated IRLM startup procedure specifies SCOPE=LOCAL.

Problem Determination: This reason code is issued by the following CSECT: DSNTLIDE
X'E4......' Codes

Many of the utilities codes ask you to determine the failing environment. This means that you should determine the following things:

- The address space in which the failure occurred
- The utility that was running
- Whether it was a restart of a utility that failed previously
- Whether the job step invocation was through the DSNUTILB program
- Whether a -DISPLAY or -TERM UTILITY command was involved.

To assist you in determining the problem, register 2 might contain a secondary reason code. This secondary reason code might be an IBM internal reason code; therefore, it might not be documented in this manual.

When DB2 resources are unavailable to utilities, message DSNT500I are issued along with the utility reason code. Refer to message DSNT500I for the correct action.

00E40000

Explanation: A function of DB2 was invoked and attempted to establish a functional recovery environment. The functional recovery element (FRE) that was created was not the first one.

This abend reason code is issued by the following CSECTs: DSNUGCKW DSNUGCUR

System Action: A record is written to SYS1.LOGREC, and an SVC dump is requested. The execution unit is abended.

Operator Response: Notify the system programmer.

Problem Determination: This is a DB2 internal error. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 5.

00E40001

Explanation: No cursor table was present at entry to database services portion of utility.

This abend reason code is issued by the following CSECT: DSNUGRAR

System Action: The utility job step that caused the function to be requested is abended. Utility processing is not initiated.

System Programmer Response: This is an internal error. Determine the failing environment. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 5, 32, 46, 60, 61.

00E40002

Explanation: The caller of the database services portion of the utility was in the wrong protect key.

This abend reason code is issued by the following CSECTs: DSNUGBAC, DSNUGRAR

System Action: The utility job step that caused the function to be requested is abended. The utility job is placed in the stopped state.

User Response: Notify the system programmer.

System Programmer Response: Determine the failing environment.

If a JOBLIB or STEPLIB is being used in the batch utility job, check that all application program libraries included in the concatenation are authorized.

Check that the batch utility program DSNUTILB was included in the MVS program properties table during the installation of DB2. The entry for DSNUTILB in the MVS program properties table was provided by MVS. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 5, 32, 46, 60, 61.

00E40003

Explanation: An error occurred while getting FRBPARM from application storage.

This abend reason code is issued by the following CSECT: DSNUGRAR

System Action: The utility job step that caused the function to be requested is abended. The utility job is placed in the stopped state.

System Programmer Response: Determine the failing environment, in particular whether invocation was through program DSNUTILB. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: If the environment was DSNUTILB, the problem could be internal.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 5, 32, 46, 60, 61.

00E40004

Explanation: An error occurred while getting FRB from application storage.

This abend reason code is issued by the following CSECT: DSNUGRAR

System Action: The utility job step that caused the function to be requested is abended. The utility job is placed in the stopped state.
System Programmer Response: Determine the failing environment. In particular, determine whether invocation was through program DSNUUTILB. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: If the environment was DSNUUTILB, the problem could be internal.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051. 1, 5, 32, 46, 60, 61.

00E40005

Explanation: A nonzero reason code was returned from MVS sort.

This abend reason code is issued by the following CSECT: DSNUGSOR

System Action: Any error message generated by sort in conjunction with the nonzero reason code is directed to the device/data set identified by the UTPRINT DD statement in the utility job step.

Error message DSNU044I, that contains the nonzero reason code, is directed to the device/data set identified by the SYSPRINT DD statement in the utility job step.

User Response: Determine the cause of the error. If the error can be corrected, the utility may be restarted from the beginning of the sort phase by using the ‘RESTART(PHASE)’ parameter. If the error prevents the utility from completing, the -TERM command should be issued to remove the stopped utility from the system. The -TERM UTILITY should seldom be used when the stopped utility is REORG.

Operator Response: An operator with SYSOPR authority can issue the -TERM UTILITY command to release the resources claimed by the stopped utility (this may not be necessary).

Problem Determination: This abend is accompanied by the utility message DSNU044I, that contains the sort reason code and an SVC dump. In most cases, the error messages from SORT that are sent to the device/data set identified by the UTPRINT DD statement identify the problem. The dump may not be needed. If SORT is unable to open the UTPRINT data set, only the message and abend are provided. In this case, correct the problem associated with the UTPRINT DD statement, and restart the job with the RESTART(PHASE) option.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051. 1, 5, 32, 46, 60, 61.

00E40006

Explanation: An error was detected while manipulating the utility-in-progress bits of the DBA table. The error might occur if the SYSIBM.SYSUTIL table and the DBA table are out of sync, if the utility-in-progress condition was not properly reset after execution of a prior utility, or if a resource unavailable condition exists.

This abend reason code is issued by the following CSECT: DSNUGUIP

System Action: Utility processing is abended. This abend might be accompanied by message DSNT500I. An SDUMP might be requested.

User Response: If applicable, correct the resource unavailable condition identified by the DSNT500I message. For an explanation of resource types, see “Resource types” on page 1053. Either restart the utility from the last commit point or terminate the utility and submit it again.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code. Consult the system programmer to diagnose the problem.

System Programmer Response: Use the -DISPLAY UTILITY command to display the status of any utilities in progress. Determine if another utility is active on the same table space. Use the -DISPLAY DATABASE command to determine if the table space has a utility-in-progress condition set on.

The utility-in-progress bit is turned on only for table spaces. If a utility is run against an index, the utility-in-progress bit is turned on for the appropriate table space.

A utility-in-progress condition set without a corresponding entry for an active or stopped utility in the SYSTUTIL table is an inconsistent condition caused by a prior error. To resolve this, issue a -START DATABASE command specifying the proper table space with the ACCESS(FORCE) parameter. This causes the utility-in-progress status to be cleared.

If the problem cannot be corrected, determine the failing environment. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: If the condition cannot be corrected, determine the failing environment.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051. 1, 5, 32, 46, 60, 61, 72.

00E40007

Explanation: The COPY utility function is unable to open the table space as directed. The failure can occur because the table space is currently not available. The failure can also be an internal error.

This abend reason code is issued by the following CSECTs: DSNUBAID DSNUBASI

System Action: If the table space is currently not available, a DSNT500I RESOURCE UNAVAILABLE message is directed to the device or data set identified by the SYSPRINT DD statement. The utility job step is placed in the stopped state.

User Response: If the abend was accompanied by a DSNT500I message, look up DSNT500I in “DSNT... Messages” on page 315 to determine the cause of the resource unavailability. You can restart the utility when the resource becomes available, or you can terminate the utility job step and resubmit the job at a later time.

If a DSNT500I message was not issued, an internal processing error occurred. Provide the system programmer with dumps and messages for fault analysis.

Operator Response: After the environmental information is determined, an operator with SYSOPR authority can terminate the utility job step and free the resources, but this might not be necessary.

System Programmer Response: If a DSNT500I message preceded the abend, follow the procedures outlined under that message number in “DSNT... Messages” on page 315 for...
Problem Determination. Otherwise, determine the failing environment.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** This is an internal error.

Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051. 1, 5, 32, 46, 60, 61.

---

**00E40009**

**Explanation:** An error was detected while attempting to access the target object (table space or index space).

This abend reason code is issued by the following CSECTs: DSNUGACC, DSNUGAGS, DSNUGUTC, DSNURLOG

**System Action:** Utilities processing is abended. The abend might be accompanied by message DSNT500I. The DSNT500I message might be preceded by other related messages on the console. An SDUMP might be taken.

**User Response:** Correct the 'resource unavailable' condition identified by the DSNT500I message. Either restart the utility from the last commit point or terminate the utility and start it again from the beginning. If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

**System Programmer Response:** Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051. 1, 5, 32, 46, 60, 61.

---

**00E4000A**

**Explanation:** An error has been detected while force closing a page set.

This abend reason code is issued by the following CSECTs: DSNUCLVE, DSNUGACC

**System Action:** Utilities processing is abended.

**User Response:** Notify the system programmer.

**System Programmer Response:** This is an internal error. Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051. 1, 5, 32, 46, 60, 61.

---

**00E4000C**

**Explanation:** This is an internal control error. The utility sub-component that manages the function control flow associated with DB2 database services has been requested to perform a function that it does not recognize.

This abend reason code is issued by the following CSECTs: DSNUBCOP, DSNUBFFR, DSNUCBFW, DSNURGRAR

**System Action:** The utility job step that caused the function to be requested is abended. The utility job is placed in the stopped state.

**User Response:** To determine how much of the requested function within the job step was completed, examine the data set/device identified by SYSPRINT. Consult the system programmer to diagnose the problem. Determine whether the utility job step should be terminated in order to release resources.

**Operator Response:** An operator with SYSOPR authority can issue the -TERM UTILITY command to free resources (this might not be necessary).

**System Programmer Response:** Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051. 1, 5, 32, 46, 60, 61.

---

**00E4000D**

**Explanation:** An error was detected while scanning or updating table SYSIBM.SYSTUTIL.

This abend reason code is issued by the following CSECTs: DSNUGSRI DSNUGDIS DSNUGSRI DSNUGTER

**System Action:** Utilities processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

**User Response:** Correct the 'resource unavailable' condition identified by the DSNT500I message. Either restart the utility from the last commit point or terminate the utility and start it again from the beginning. Refer to Table 3 in Appendix B. "Problem determination" on page 1051 for an explanation of resource type codes.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

**System Programmer Response:** Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051. 1, 5, 32, 46, 60, 61.

---

**00E4000E**

**Explanation:** An error was detected while attempting to create a cursor block (CUB).

This abend reason code is issued by the following CSECTs: DSNUGACC, DSNUKINE

**System Action:** Utilities processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

**User Response:** Correct the 'resource unavailable' condition identified by the DSNT500I message. Either restart the utility from the last commit point or terminate the utility and start it again from the beginning. Refer to Table 3 in Appendix B. "Problem determination" on page 1051 for an explanation of resource type codes.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem.
Problem Determination: If the condition cannot be corrected, determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051, 1, 5, 32, 46, 60, 61.

00E4000F
Explanation: An error was detected while checking or setting the state of the database exception table (DBET). This abend might be accompanied by message DSNT500I.

System Action: Utilities processing is abended. An SDUMP might be requested.

User Response: Correct the 'resource unavailable' condition identified by message DSNT500I. Either restart the utility from the last commit point or terminate the utility and restart it from the beginning. Refer to Table 3 in Appendix B, "Problem determination" on page 1051 for an explanation of resource type codes.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the condition cannot be corrected, determine the failing environment. Refer to Section 3 of this manual, it is an internal IBM code.

Problem Determination: If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

00E40011
Explanation: An attempt to extend the error range information in the database allocation table (DBAT) failed.

This abend reason code is issued by the following CSECT: DSNUCDA1

System Action: The I/O error that did not get recorded in the DBAT table was reported in error message DSNU086E, that was directed to the device/data set identified by the SYSPRINT DD statement. The utility job step is placed in the stopped state.

User Response: The system programmer should be notified and given the relevant environmental information. Subsequent to its correction, the stopped utility can be restarted using the RESTART option, or it can be terminated and resubmitted at a later time.

Operator Response: An operator with SYSOPR authority can issue the -TERM UTILITY command to release the resources claimed by the stopped utility (this might not be necessary).

System Programmer Response: Determine the failing environment. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: This is an internal error.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051, 1, 5, 32, 46, 60, 61.

00E40012
Explanation: An error was detected while attempting to find a database descriptor block (DBD) address.

This abend reason code is issued by the following CSECTs:

DSNUGACC DSNUGCXP DSNUGMAP DSNUIQUA DSNUSIRI

System Action: Utilities processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

User Response: Correct the 'resource unavailable' condition identified by the DSNT500I message. Either restart the utility from the last commit point or terminate the utility and start it again from the beginning. Refer to Table 3 in Appendix B, "Problem determination" on page 1051 for an explanation of resource type codes.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

Problem Determination: If the condition cannot be corrected, determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051, 1, 5, 32, 60, 61, 46.
00E40013

Explanation: An error was detected while creating a ECB exit for -STOP DB2.

This abend reason code is issued by the following CSECT: DSNUGBAC

System Action: Utilities processing is abended.

User Response: Notify the system programmer.

System Programmer Response: Determine the failing environment. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: This is an internal error.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051.

00E40014

Explanation: An error was detected from the terminate thread function.

This abend reason code is issued by the following CSECT: DSNUGBAC

System Action: Utilities processing is abended.

User Response: Notify the system programmer.

System Programmer Response: Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: This is an internal error.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051.

00E40015

Explanation: A RECOVER utility was initiated with the ERROR RANGE option specified. The request was rejected when it was determined that there was not a sufficient number of alternate tracks for the pages in the error range to be recovered.

This abend reason code is issued by the following CSECT: DSNUCRVT

System Action: The abend was issued in the database services address space. The dumps requested are dependent upon the JCL of the utility job step. The utility job step is abended. The utility is placed in the 'stopped' state.

User Response: Recovery can be accomplished by resubmitting the RECOVER utility without the ERROR RANGE option. Recovery can be by data set or the table space as a whole.

Operator Response: An operator with SYSOPR authority can issue the -TERM UTILITY command to free resources if this might have required restart of a utility. A message is issued prior to this abend code to indicate the type of error.

Problem Determination: Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051.

00E40016

Explanation: A Recover utility was initiated with the ERROR RANGE option specified. An error was detected by the media manager while processing a MMCNVT macro invocation. This is an internal error within either DB2 or the media manager.

This abend reason code is issued by the following CSECT: DSNUCRVT

System Action: The utility job step that caused the function to be requested is abended. The utility job is placed in the stopped state.

Operator Response: An operator with SYSOPR authority can issue the -TERM UTILITY command to free resources if that should prove necessary (this might not be necessary).

System Programmer Response: The MMCNVT macro converts a VSAM RBA to its physical track address (CCHHR). At the time of abend, the following registers contain relevant information:

R2 Address of media manager interface block (MMIB).
R3 Address of field containing VSAM RBA to be converted.
R4 Address of area to receive CCHHR.
R5 MMCNVT places UCB address here.
R8 Return code from media manager. If you suspect an error in media manager, refer to DFSMS/MVS: Diagnosis Reference for DFSMSdp.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051.

00E40017

Explanation: An error was detected from terminate identify.

This abend reason code is issued by the following CSECT: DSNUGBAC

System Action: Utilities processing is abended.

User Response: Notify the system programmer.

System Programmer Response: Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: This is an internal error.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051.

00E40018

Explanation: Either an error was detected during the execution of a restarted utility or a condition was detected that might have required restart of a utility. A message is issued prior to this abend code to indicate the type of error.

This abend reason code is issued by the following CSECT: DSNUGBAC

System Action: Utility processing is abended.

User Response: Notify the system programmer.

System Programmer Response: Check messages issued prior to this abend code to determine the cause of the error. Correct the error, and restart the job.
Problem Determination: This abend is forced to allow restart of the utility when work data sets are used and the disposition is (MOD,DELETE,CATLG).

00E4001A
Explanation: An error was detected while using SVC 99 to retrieve information on the DD statements supplied.
This abend reason code is issued by the following CSECT: DSNUGCD
System Action: Utility processing is abended.
User Response: Notify the system programmer.
System Programmer Response: Determine the failing environment.
Problem Determination: This is a DB2 internal error. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 5, 32, 46, 60, 61.

00E4001B
Explanation: A DB2 utility has attempted to allocate a data set to the generic unit name SYSALLDA, but the allocation has failed. This dynamic allocation was attempted because the utility had been requested to perform sorts in parallel, a DFSORT data set was present in the job JCL, the DFSORT data set was allocated to SYSIN, and no SORTDEVT specification was supplied in the utility control statement.
System Action: Utility processing is abended.
User Response: If the failing utility was REORG, and the UNLOAD phase had completed, restart the utility after doing one of the following:
- Delete the DFSORT data set from the job JCL.
- Create a DASD data set containing the DFSORT control statements you wish to use and change the job JCL to point to that data set instead of SYSIN.
If the failing utility was not REORG, or if it was REORG and the UNLOAD phase had not completed, use the -TERM command to terminate the utility. Then resubmit the job after doing one of the following:
- Delete the DFSORT data set from the job JCL.
- Create a DASD data set containing the DFSORT control statements you wish to use and change the job JCL to point to that data set instead of SYSIN.
- Use the SORTDEVT keyword in the utility control statement to specify a generic device unit name (such as SYSDA) that can be used to do the dynamic allocation.

00E4001C
Explanation: An error was detected while attempting to map externals to a specific file object descriptor (OBD).
This abend reason code is issued by the following CSECT: DSNUGMAP
System Action: Utilities processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.
User Response: Correct the ‘resource unavailable’ condition identified by the DSNT500I message. Either restart the utility from the last commit point or terminate the utility and start it again from the beginning. Refer to Table 3 in Appendix B, “Problem determination” on page 1051 for an explanation of resource type codes.
If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.
Problem Determination: If the condition cannot be corrected, determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 5, 32, 46, 60, 61.

00E4001D
Explanation: An error was detected while attempting to read a row from the SYSLIBM.SYSSYNONYMS table.
This abend reason code is issued by the following CSECT: DSNUGMAP
System Action: Utilities processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.
User Response: Correct the ‘resource unavailable’ condition identified by the DSNT500I message. Either restart the utility from the last commit point or terminate the utility and start it again from the beginning. Refer to Table 3 in Appendix B, “Problem determination” on page 1051 for an explanation of resource type codes.
If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem.
Problem Determination: If the condition cannot be corrected, determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 5, 32, 46, 60, 61.

868 Messages and Codes
**00E4001F**

**Explanation:** An error was detected while attempting to read a row from the SYSIBM.SYSINDEXES table.

This abend reason code is issued by the following CSECT: DSNUGMAP

**System Action:** Utilities processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

**User Response:** Correct the 'resource unavailable' condition identified by the DSNT500I message. Either restart the utility from the last commit point or terminate the utility and start it again from the beginning. Refer to Table 3 in [Appendix B](#) for an explanation of resource type codes.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

**Problem Determination:** If the condition cannot be corrected, determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in [Appendix B](#) for an explanation of resource type codes.

---

**00E40020**

**Explanation:** An error was detected while attempting to RARQ to the database storage.

This abend reason code is issued by the following CSECT: DSNUGPRE

**System Action:** Utilities processing is abended.

**User Response:** Notify the system programmer.

**System Programmer Response:** Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** This is an internal error.

Collect the following diagnostic items listed in [Appendix B](#) for an explanation of resource type codes.

---

**00E40021**

**Explanation:** Utility processing was performing an AUTHORIZATION CHECK for the utility user and specified object, when an error was detected. A necessary resource for the check was not available.

This abend reason code is issued by the following CSECTs: DSNUGMAP, DSNUKINE

**System Action:** Utility processing is abended.

**User Response:** Notify the system programmer.

---

**00E40022**

**Explanation:** An error was detected while attempting to read a row from the SYSIBM.SYSUTIL table.

This abend reason code is issued by the following CSECT: DSNUGSUU

**System Action:** Utilities processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

**User Response:** Correct the 'resource unavailable' condition identified by the DSNT500I message. Either restart the utility from the last commit point or terminate the utility and start it again from the beginning. Refer to Table 3 in [Appendix B](#) for an explanation of resource type codes.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

**Problem Determination:** If the condition cannot be corrected, determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in [Appendix B](#) for an explanation of resource type codes.

---

**00E40023**

**Explanation:** The internal protocols required for utility update of table the SYSIBM.SYSUTIL have been violated. Utility modifications to SYSIBM.SYSUTIL were not committed.

This abend reason code is issued by the following CSECTs: DSNUGSRI, DSNUGSRX

**System Action:** The utility job step that caused the function to be requested is abended. The utility job is placed in the stopped state.

**Operator Response:** An operator with SYSOPR authority can issue the -TERM UTILITY command to release the resources claimed by the stopped utility (this might not be necessary).

**System Programmer Response:** Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** This is an internal error.

Collect the following diagnostic item listed in [Appendix B](#) for an explanation of resource type codes.
00E40024

Explanation: Internal protocols required for utility serialization were violated. Specifically, utility serialization cleanup was not invoked upon completion of utility processing.

This abend reason code is issued by the following CSECT: DSNUGUCA

System Action: The utility job step is terminated, placing the utility in the stopped state.

Operator Response: An operator with SYSOPR authority can issue the -TERM UTILITY command to release the resources claimed by the stopped utility (this might not be necessary).

System Programmer Response: Determine the failing environment. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051, 47.

00E40025

Explanation: Utility processing attempted to allocate resources for this utility job step. The allocate protocol has returned a nonzero return code.

This abend reason code is issued by the following CSECT: DSNUGUCA

System Action: Utilities processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

User Response: Correct the ‘resource unavailable’ condition identified by the DSNT500I message. Either restart the utility from the last commit point or terminate the utility and start it again from the beginning. Refer to Table 3 in Appendix B, “Problem determination” on page 1051 for an explanation of resource type codes.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

Operator Response: An operator with SYSOPR authority can issue the -TERM UTILITY command to release the resources claimed by the stopped utility, but this might not be necessary.

Problem Determination: If the condition cannot be corrected, determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051, 1, 5, 32, 46, 60, 61.

00E40028

Explanation: An error has been detected while attempting to COMMIT.

This abend reason code is issued by the following CSECTs: DSNUGUCA, DSNUGAGS

System Action: Utilities processing is abended.

User Response: Notify the system programmer.

System Programmer Response: Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: This is an internal error.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051, 1, 5, 32, 46, 60, 61.

00E40029

Explanation: An error has been detected while attempting to read a row from the SYSIBM.SYSUTILT table.

This abend reason code is issued by the following CSECTs: DSNUGUCA, DSNUGAGS

System Action: Utilities processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

User Response: Correct the ‘resource unavailable’ condition identified by the DSNT500I message. Either restart the utility from the last commit point or terminate the utility and start it again from the beginning. Refer to Table 3 in Appendix B, “Problem determination” on page 1051 for an explanation of resource type codes.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

Problem Determination: If the condition cannot be corrected, determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051, 1, 5, 32, 46, 60, 61.
00E4002A
Explanation: During utility restart processing, a record in the SYSUTILX checkpoint/restart area was not recognized. The utility might not be restartable.
This abend reason code is issued by the following CSECT: DSNUGSUG
System Action: Utility processing is abended.
Operator Response: An operator with SYSOPR authority can issue the -TERM UTILITY command to release the resources claimed by the stopped utility.
System Programmer Response: Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Problem Determination: This is an internal error. Collect the following diagnostic items listed in Appendix B, Diagnostic Items for Problem Determination: 1, 2, 4, 30, 31, 46, 49.

00E4002B
Explanation: The utility check pending protocol detected invalid parameters for the setting or resetting of the check pending state.
This abend reason code is issued by the following CSECT: DSNUGCKP
System Action: The utility job is abended.
User Response: Notify the system programmer.
System Programmer Response: Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Problem Determination: This is an internal error. Collect the following diagnostic items listed in Appendix B, Diagnostic Items for Problem Determination: 1, 2, 4, 30, 31, 46, 49.

00E4002D
Explanation: This abend is issued as a result of an error other than the 'resource unavailable' condition that was encountered while attempting to update a DB2 catalog for the setting or resetting of the check pending state.
This abend reason code is issued by the following CSECT: DSNUGCKP
System Action: An SVC dump is requested, the error flag in the DBA table is set on for the table space for which the check pending state is being set or reset, and processing continues.
User Response: Notify the system programmer.
System Programmer Response: Determine the failing environment. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Problem Determination: Determine the reason for the catalog access error. This abend is accompanied by console message DSNU972I. See the problem determination for this message for a description of how processing is affected by this error.
Collect the following diagnostic items listed in Appendix B, Diagnostic Items for Problem Determination: 1, 2, 4, 30, 31, 46, 49.

00E4002E
Explanation: During utility serialization or utility restart, an attempt to either read or retrieve from SYSUTIL or SYSUTILX has failed.
System Action: DB2 abends the utility job.
User Response: Notify the system programmer.
System Programmer Response: Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Problem Determination: This is an internal error. Collect the following diagnostic items listed in Appendix B, Diagnostic Items for Problem Determination: 1, 5, 32, 46, 69.

00E40030
Explanation: A -DISPLAY UTILITY or -TERM UTILITY command has failed in the command subsystem.
This abend reason code is issued by the following CSECT: DSNUGCC
System Action: Command processing is terminated. For -TERM UTILITY, all previous actions taken by the command are backed out.
System Programmer Response: Determine the failing environment. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Problem Determination: This error is accompanied by additional messages and/or SVC dumps that identify the failure in the utility command subsystem. Refer to this manual under those messages and/or codes for additional problem determination.
Collect the following diagnostic items listed in Appendix B, Diagnostic Items for Problem Determination: 1, 5, 32, 46, 69.

00E40033
Explanation: Internal control blocks were scanned for internal IDs representing the SYSIBM.SYSUTIL table. No corresponding ID was found.
This abend reason code is issued by the following CSECTs: DSNUGAGS DSNUGDIS DSNUGSRI DSNUGTER
System Action: The utility job step is terminated, placing the utility in the stopped state.
Operator Response: An operator with SYSOPR authority can issue the TERM UTILITY command to release the resources claimed by the stopped utility, but this might not be necessary.
System Programmer Response: Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Problem Determination: This is an internal error. Collect the following diagnostic item listed in Appendix B, Diagnostic Items for Problem Determination: 47.
00E40034
Explanation: The utility message generator was unable to obtain the requested storage. The available storage used to buffer messages produced by the database memory is full and a request to obtain more storage from subpool 229 failed.
This abend reason code is issued by the following CSECT: DSNUGMSG

System Action: Utility processing abends. No SYSAEND dump or SVC dump is requested.
User Response: This abend occurs due to a system resource limit. It might be necessary to modify the utility control statement.
If the abend occurs as a result of the LOAD utility, attempt to restart the job. If failure recurs, it might be necessary to change the discard limit or correct the situation that caused many error messages to be produced.
If the abend occurs as a result of the REPAIR utility, change the beginning page number to the last page number printed plus one, or change the number of pages to be dumped to a smaller number. Resubmit the job.
If the abend occurs as a result of the REBUILD INDEX utility, the unique index might have to be dropped and recreated as a nonunique index. If a unique index is required and the data contains a large number of duplicates, the duplicates must be reduced before attempting to rebuild the index again.

Problem Determination: Refer to the prior error messages to determine how to correct the problem.

00E40035
Explanation: The -START ACCESS FORCE command was issued when DSNDB01.SYSUTILX was in a pending state, which prohibits further processing. The pending state was either copy or recovery pending.
This abend reason code is issued by the following CSECT: DSNUGTER

System Action: Utility processing is abended.
User Response: Notify the system programmer so that the pending condition can be resolved.

System Programmer Response: Issue a -DISPLAY DATABASE command to determine the state of DSNDB01.SYSUTILX. If the state is copy pending, do a full image copy. If the state is recovery pending, use the RECOVER utility to recover DSNDB01.SYSUTILX.
If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Refer to Table 3 in Appendix B, “Problem determination” on page 1051 for an explanation of resource type codes.

00E40040
Explanation: An error was returned from the DSNILREQ protocol during page level locking. This abend code is accompanied by message DSNT500I that explains the ‘resource unavailable’ condition.
This abend reason code is issued by the following CSECTs: DSNUCBF, DSNUCBRP.

System Action: Utility processing is abended and the utility is placed in a stopped state.

User Response: Correct the ‘resource unavailable’ condition identified by the DSNT500I message. Then, either restart the utility from the last commit point or terminate the utility and restart it from the beginning.

System Programmer Response: If the conditions identified in the DSNT500I message can not be corrected, determine the failing environment. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Refer to the description for message DSNT500I.
Refer to Table 3 in Appendix B, “Problem determination” on page 1051 for an explanation of resource type codes.

00E40045
Explanation: A failure has occurred during an attempt to free storage.
This abend reason code is issued by the following CSECTs: DSNUGSTB, DSNUGSTA

System Action: The utility job step that caused the function to be requested is abended. The utility job is placed in the stopped state.
Operator Response: An operator with SYSOPR authority can terminate the utility job step and free the resources (this might not be necessary). However, this should not be done until after the diagnostic environment has been established.
System Programmer Response: Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: This is an internal error.
Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 5, 32, 46, 60, 61.

00E40051
Explanation: Invalid OTYPE was passed to DSNUGMAP.
This abend reason code is issued by the following CSECT: DSNUGMAP

System Action: The utility job step that caused the function to be requested is abended. The utility job is placed in the stopped state.
Operator Response: An operator with SYSOPR authority can terminate the utility job step and free up any resources (this might not be necessary). However, this should not be done until after the diagnostic environment has been established.
System Programmer Response: Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: This is an internal error.
Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 5, 32, 46, 60, 61.
00E40053

Explanation: An invalid OBID of zero was found by the module that maps external object names to OBIDs.

This abend reason code is issued by the following CSECT: DSNUGMAP

System Action: The utility job step that caused the function to be requested is abended. The utility job is placed in the stopped state.

User Response: Notify the system programmer.

Operator Response: An operator with SYSOPR authority can terminate the utility job step and free any resources (this might not be necessary). However, this should not be done until after the diagnostic environment has been established.

System Programmer Response: Determine the failing environment. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: OBIDs are extracted from the DB2 catalog. The OBID for a table space is found in the SYSIBM.SYSTABLESPACE table. The OBID for a table is found in the SYSIBM.SYSTABLES table. The OBID for an index is found in the SYSIBM.SYSINDEXES table. If the object exists, the OBID cannot be zero.

Collect the following diagnostic items listed in Appendix B:

"Problem determination" on page 1051 1, 5, 32, 46, 60, 61.

00E40070

Explanation: A utility data set could not be opened. The abend was issued to place the utility in the stopped state for review and correction.

This abend reason code is issued by the following CSECT: DSNUGSDA

System Action: Utility error message DSNU036I or DSNU037I was issued. To identify the DD statement associated with the DCB that could not be opened. If neither message was issued, the SYSPRINT DD statement was omitted. The utility job step is placed in the stopped state.

User Response: If the ddname is one you submitted, review and correct it. Then resubmit the job. If the ddname is one the system provided, consult the system programmer. If neither message was issued, verify that the SYSPRINT DD statement exists.

Operator Response: An operator with SYSOPR authority can terminate the utility to release the held resources, but this may not be necessary.

System Programmer Response: Correct the JCL, and resubmit the job.

Problem Determination: Collect the following diagnostic items listed in Appendix B: "Problem determination" on page 1051 1, 5, 32, 46, 60, 61.

00E40071

Explanation: An I/O error was encountered on a required OS/VS data set. An abend was issued to place the utility in a stopped state for review and correction. Resubmit the utility.

This abend reason code is issued by the following CSECT: DSNUGSDD

System Action: One of two utility error messages (DSNU032E or DSNU040I) is sent to the data set/device associated with the SYSPRINT DD statement of the utility job step. The error message identifies the error and the data set in error.

The utility is stopped at the beginning of the phase that used the OS/VS data set.

User Response: If the utility message was DSNU032E, the job can be restarted if an undamaged output data set is provided. Obtain an undamaged output data set, and restart the utility job step with the RESTART(PHASE) option. The job cannot be restarted if an unload data set, during the RELOAD phase of either the LOAD or REORG, is used as input instead of output.

If utility message was DSNU040I, determine the problem as described in Problem Determination. Then either resubmit the utility job using the RESTART option, or -TERM the utility job step.

Operator Response: An operator with SYSOPR authority can terminate the utility and release any held resources (this might not be necessary).

Problem Determination: Problem determination depends upon which error message was directed to the data set/device identified by the SYSPRINT DD statement.

If DSNU032E was issued, an I/O error was encountered on a required utility work data set. The message describes the error and the data set in error.

If DSNU040I was issued, an error has occurred during BSAM access to the data set defined by the DD statement specified in the message. The DECB provided as a hexadecimal string contains the ECB in the first four bytes. The first byte of the ECB contains status bits that indicate the cause of the error.

There might be an IOS message on the MVS console SYSLG indicating the type of I/O error that occurred. If an IOS message was issued, follow the problem determination directions for the message. Refer to the appropriate MVS publication for the meaning of the status bits.

Collect the following diagnostic items listed in Appendix B: "Problem determination" on page 1051 1, 5, 32, 46, 60, 61.

00E40072

Explanation: An error was encountered while processing a BSAM data set.

This abend reason code is issued by the following CSECT: DSNUGSDD

System Action: A message identifying the error might have been sent to the data set/device associated with the SYSPRINT DD statement of the utility job step. If no prior message was produced, a dump was requested. The utility job step that caused the function to be requested is abended. The utility job is placed in the stopped state.
User Response: If a message was produced to identify the error, refer to that message description for the proper action. If no message can be found, then notify the system programmer.

Operator Response: Notify the user or system programmer.

System Programmer Response: Review the job output and failing environment. If a message was produced to identify the error, correct the error and resubmit or restart the job. If no message was produced, then a dump should have been requested. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Problem determination depends upon which error message, if any, was directed to the data set/device identified by the SYSPRINT DD statement. If a message was produced, it describes the type of error and data set involved. Refer to the message description for information on what action to take. If no message was produced, then this might be an internal error.

Collect the following diagnostic items listed in Appendix B.

Problem determination on page 1051 1, 5, 32, 46, 61.

00E40073

Explanation: An internal error was encountered while processing a BSAM data set. The utility in progress issued an internal read to a BSAM data set after end-of-file was returned for the data set.

This abort reason code is issued by the following CSECT: DSNUGSDA

System Action: The utility job step is terminated, placing the utility in the stopped state.

Operator Response: An operator with SYSOPR authority can issue the -TERM UTILITY command to release the resources claimed by the stopped utility (this might not be necessary).

System Programmer Response: Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: This is an internal error.

Collect the following diagnostic items listed in Appendix B.

Problem determination on page 1051 1, 2, 4, 5, 32, 46.

00E40074

Explanation: An internal error was encountered while processing a BSAM data set. The utility in progress issued an internal point to a BSAM data set which is opened for write. Point is only valid for data sets opened for read.

This abort reason code is issued by the following CSECT: DSNUGSDA

System Action: The utility job step is terminated, placing the utility in the stopped state.

Operator Response: An operator with SYSOPR authority can issue the -TERM UTILITY command to release the resources claimed by the stopped utility (this might not be necessary).

System Programmer Response: Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: This is an internal error.

Collect the following diagnostic items listed in Appendix B.

Problem determination on page 1051 1, 5, 32, 46, 60, 61.

00E40075

Explanation: An end-of-data (EOD) has been encountered while attempting to reposition an input data set during the restart of a utility.

This abort reason code is issued by the following CSECT: DSNUGSDA

System Action: Processing is abnormally terminated. A system dump is requested.

User Response: Review the JCL and ensure that the input data set is correct. Further analysis might be necessary.

Problem Determination: Collect the following diagnostic items listed in Appendix B.

Problem determination on page 1051 1, 5, 32, 46, 61.

00E40079

Explanation: A utility work data set has a block size that is too small to accommodate the data to be written. An abend is issued to place the utility job step in a stopped state. This allows the error to be reviewed and corrected, and the job step to be resubmitted.

This abort reason code is issued by the following CSECT: DSNUGSDA

System Action: Utility error message DSNU038I is directed to the device/data set identified by the SYSPRINT DD statement. The utility job step is placed in the stopped state.

User Response: Delete the data set in error. Change the JCL so that the block size for the data set with the ddname nominated in error message DSNU038I is at least the indicated block size. Resubmit the utility job step with RESTART(PHASE) option.

Problem Determination: Utility error message DSNU038I is directed to the device/data set identified by the SYSPRINT DD statement. It gives the name of DD statement that defines the data set with the inadequate block size and gives the minimum block size in bytes.

Collect the following diagnostic items listed in Appendix B.

Problem determination on page 1051 1, 5, 32, 46, 61.

00E40080

Explanation: An error has been detected during utility termination cleanup. The DSNXKACC CLOSEALL protocol has returned an error.

This abort reason code is issued by the following CSECT: DSNUGUCA

System Action: The utility job step is placed in the stopped state.

Problem Determination: This abend code might be accompanied by a DSN500I error message that might indicate a correctable problem.

If the DSN500I message has not been issued or if the problem can not be corrected, collect the following diagnostic items listed in Appendix B.

Problem determination on page 1051 1, 5, 32, 46, 60, 61.
00E40081

Explanation: The REORG utility has completed the UNLOAD phase while processing in a shared mode and has attempted to change to an exclusive mode for the RELOAD and subsequent phases. Utility processing has detected an internal error. This abend reason code is issued by the following CSECT: DSNUGSRX

System Action: The utility job step that caused the function to be requested is abended. The utility job is placed in the stopped state.

Operator Response: An operator with SYSOPR authority can issue the -TERM UTILITY command to release the resources claimed by the stopped utility (this might not be necessary).

System Programmer Response: Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: This is an internal error.

Collect the following diagnostic item listed in Appendix B.

00E40082

Explanation: An error has been detected by utility serialization protocols. Protocols were issued in the wrong order. This is an internal error and cannot be corrected by the user.

This abend reason code is issued by the following CSECT: DSNUGSRX

System Action: Utility processing is abnormally terminated and the utility is placed in a stopped state. An SDUMP is requested.

User Response: The -TERM UTIL command can be issued to free resources held by the failing utility.

System Programmer Response: Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

00E40083

Explanation: An error was detected by utility serialization protocols. Required parameters are missing or contain invalid values.

This is an internal error and cannot be corrected by the user.

This abend reason code is issued by the following CSECT: DSNUGASO

System Action: Utility processing is abnormally terminated and the utility is placed in a stopped state. An SDUMP is requested.

User Response: Issue the -TERM UTIL command to free resources held by the failing utility.

System Programmer Response: Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

00E40085

Explanation: A utility serialization LOCK or UNLOCK request has received an error from the IRLM. Either message DSNU0991 is issued prior to this abend code to provide information about the error or message DSN1002I is issued if the problem occurred while running the START DATABASE ACCESS(FORECE) command.

This abend reason code is issued by the following CSECTs: DSNUGDIS DSNUGFL DSNUGSRI DSNILSTS

System Action: Either the utility job step is terminated and the utility is placed in a stopped state or the START DATABASE command abnormally terminates.

User Response: Notify the system programmer. An attempt can be made to restart the utility or rerun the START DATABASE command.

Operator Response: An operator with SYSOPR authority can issue the -TERM UTILITY command if the user does not wish to attempt to restart the utility. For the START DATABASE command, rerun the command.

System Programmer Response: Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem. For the START DATABASE command, no response is needed.

00E40090

Explanation: Utility processing is unable to invoke the designated utility, because an internal error has occurred. The specified utility is not recognized by the utility job controller.

This abend reason code is issued by the following CSECTs: DSNUGUTC DSNUGDFI DSNUGSRI

System Action: The utility job step is terminated, placing the utility in the stopped state.

Operator Response: An operator with SYSOPR authority can issue the -TERM UTILITY command to release the resources claimed by the stopped utility (this might not be necessary).

System Programmer Response: Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: This is an internal error.

Collect the following diagnostic items listed in Appendix B.

00E40091

Explanation: Utility access path creation was invoked specifying an incorrect OBID.

This abend reason code is issued by the following CSECT: DSNUGACC

System Action: The utility job step is terminated, placing the utility in the stopped state.

Operator Response: An operator with SYSOPR authority can issue the -TERM UTILITY command to release the resources claimed by the stopped utility (this might not be necessary).
00E40096  •  00E400C1

System Programmer Response: Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: This is an internal error.
Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 5, 32, 46, 60, 61.

Explanation: Utility access path creation has detected an invalid OBID. The specified value is too small, too large, or does not exist in the subsystem.

This abend reason code is issued by the following CSECT: DSNUGACC

System Action: The utility job step that caused the function to be requested is abended. The utility job is placed in the stopped state.

Operator Response: An operator with SYSOPR authority can issue the -TERM UTILITY command to release the resources claimed by the stopped utility (this might not be necessary).

System Programmer Response: Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: This is an internal error.
Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 5, 32, 46, 60, 61.

00E400A0

Explanation: An error was detected while the internal structure to access the tables of a table space was being built. The table space had no tables.

This abend reason code is issued by the following CSECT: DSNUGACC

System Action: The utility job step that caused the function to be requested is abended. The utility job is placed in the stopped state.

Operator Response: An operator with SYSOPR authority can issue the -TERM UTILITY command to release the resources claimed by the stopped utility (this might not be necessary).

System Programmer Response: Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: This is an internal error.
Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 5, 32, 46, 60, 61.

00E400AF

Explanation: A DSNGDALT macro invocation has returned a nonzero return code. An attempt to modify a DBD by setting the OBIDFIB bit on was unsuccessful.

This abend reason code is issued by the following CSECTs: DSNUGFIB, DSNURFIB

System Action: Processing is abended.

User Response: This abend might be caused by an unavailable resource. Check for a DSNT500I message being issued prior to the abend. A dump will be suppressed in this case. If no ‘resource unavailable’ condition is indicated, notify the system programmer.

System Programmer Response: Determine the failing environment. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 5, 32, 46, 60, 61.

00E400B0

Explanation: Utilities invocation of CREATE THREAD has ended abnormally.

This abend reason code is issued by the following CSECTs: DSNUGBAC, DSNUGUTC

System Action: The utility job step is terminated. No record of the utility job step remains in the system.

User Response: Notify the system programmer.

System Programmer Response: Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: This is an internal error.
Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 5, 32, 46, 60, 61.

00E400C0

Explanation: A -STOP DB2 MODE(FORCE) command has been entered while a utility was executing, or a -STOP DB2 MODE(QUIESCE) command has been entered while a utility with multiple input statements was executing and the current input statement execution has completed.

This abend reason code is issued by the following CSECTs: DSNUGPRE, DSNUGUTC

System Action: Utility processing is abended.

User Response: Notify the system programmer.

System Programmer Response: Determine the reason that the -STOP DB2 command was issued. After DB2 has been started again, the utility job can be restarted.

00E400C1

Explanation: DB2 failed while attempting to latch or unlatch an index page. This is an internal error.

System Action: The utility job step that caused the function to be requested is abended. The utility job is placed in the stopped state.

User Response: Notify the system programmer.

System Programmer Response: Determine the failing environment.

Problem Determination: Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

This abend reason code is issued by the following CSECTs:

<table>
<thead>
<tr>
<th>CSECT 1</th>
<th>CSECT 2</th>
<th>CSECT 3</th>
<th>CSECT 4</th>
<th>CSECT 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>DSNUSDX</td>
<td>DSNURFIB</td>
<td>DSNUCBRL</td>
<td>DSNUKGET</td>
<td>DSNUBXZ</td>
</tr>
<tr>
<td>DSNUIFX</td>
<td>DSNURBFA</td>
<td>DSNURBXC</td>
<td>DSNURBIX</td>
<td>DSNURBZ</td>
</tr>
</tbody>
</table>
00E400C2

Explanation: DB2 received an unexpected return code from MVS. This is an internal error.

System Action: The utility job step that caused the function to be requested is abended. The utility job is placed in the stopped state.

User Response: Notify the system programmer.

Problem Determination: Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

00E400C2

Explanation: DB2 received an unexpected return code from MVS. This is an internal error.

System Action: The utility job step that caused the function to be requested is abended. The utility job is placed in the stopped state.

User Response: Notify the system programmer.

Problem Determination: Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

00E40100

Explanation: DB2 failed during execution of the DSNBGETP macro.

This abend reason code is issued by the following CSECTs:
- DSNUCBFW
- DSNUBCLS
- DSNUCRVA
- DSNUBAFI
- DSNUBAPD
- DSNUBAS

System Action: The utility job step that caused the function to be requested is abended. The utility job is placed in the stopped state.

User Response: Notify the system programmer.

System Programmer Response: Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: This is an internal error.

Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051 1, 5, 32, 46, 60, 61.

00E40101

Explanation: DB2 failed during execution of the DSNBSETW macro.

This abend reason code is issued by the following CSECT: DSNUBAS

System Action: The utility job step that caused the function to be requested is abended. The utility job is placed in the stopped state.

User Response: Notify the system programmer.

System Programmer Response: Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: This is an internal error.

Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051 1, 5, 32, 46, 60, 61.

00E40102

Explanation: The data manager subcomponent of DB2 failed during execution of the DSNICCSCOB macro.

This abend reason code is issued by the following CSECT: DSNUARHR2

System Action: The utility job step that caused the function to be requested is abended. The utility job is placed in the stopped state.

User Response: Notify the system programmer.

System Programmer Response: Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: This is an internal error.

Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051 1, 5, 32, 46, 60, 61.

00E40103

Explanation: The data manager subcomponent of DB2 failed during execution of the DSNICCSCOB macro.

This abend reason code is issued by the following CSECTs: DSNUAADP1, DSNUADP2

System Action: Utility processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

User Response: Correct the 'resource unavailable' condition identified by the DSNT500I message. Either restart the utility from the last commit point or terminate the utility and start it again from the beginning.

If the condition cannot be corrected, determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051 1, 5, 32, 46, 60, 61.

00E40104

Explanation: The data manager subcomponent of DB2 failed during execution of the DSNIDISP macro.

This abend reason code is issued by the following CSECTs: DSNUGDT, DSNULOG1

System Action: The utility job step that caused the function to be requested is abended. The utility job is placed in the stopped state.

User Response: Notify the system programmer.

System Programmer Response: Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: This is an internal error.

Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051 1, 5, 32, 46, 60, 61.

00E40105

Explanation: The data manager subcomponent of DB2 failed during execution of the DSNIDLET macro.

This abend reason code is issued by the following CSECTs: DSNUAADP1, DSNUAADP2, DSNURLAP, DSNURRR1

System Action: Utility processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.
**User Response:** Correct the 'resource unavailable' condition identified by the DSNT500I message. Either restart the utility from the last commit point or terminate the utility and start it again from the beginning. Refer to Section 3 of **Diagnosis Guide and Reference** for information on identifying and reporting the problem.

Collect the following diagnostic items listed in **Appendix B.**

**Problem determination** on page 1051 for an explanation of resource type codes.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

**Problem Determination:** If the condition cannot be corrected, determine the failing environment. Refer to Section 3 of **Diagnosis Guide and Reference** for information on identifying and reporting the problem.

Collect the following diagnostic items listed in **Appendix B.**

**Problem determination** on page 1051 for an explanation of resource type codes.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

**Problem Determination:** If the condition cannot be corrected, determine the failing environment. Refer to Section 3 of **Diagnosis Guide and Reference** for information on identifying and reporting the problem.

Collect the following diagnostic items listed in **Appendix B.**

**Problem determination** on page 1051 for an explanation of resource type codes.

**Explanation:** The data manager subcomponent of DB2 failed during execution of the DSNIIRDO macro.

This aborted reason code is issued by the following CSECTs:

DSNUCLVL, DSNUCRVL

**System Action:** Utility processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

**User Response:** Correct the 'resource unavailable' condition identified by the DSNT500I message. Either restart the utility from the last commit point or terminate the utility and start it again from the beginning. If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

**Problem Determination:** If the condition cannot be corrected, determine the failing environment. Refer to Section 3 of **Diagnosis Guide and Reference** for information on identifying and reporting the problem.

Collect the following diagnostic items listed in **Appendix B.**

**Problem determination** on page 1051 for an explanation of resource type codes.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

**Problem Determination:** If the condition cannot be corrected, determine the failing environment. Refer to Section 3 of **Diagnosis Guide and Reference** for information on identifying and reporting the problem.

Collect the following diagnostic items listed in **Appendix B.**

**Problem determination** on page 1051 for an explanation of resource type codes.

**Explanation:** The data manager subcomponent of DB2 failed during execution of the DSNIPGER macro.

This aborted reason code is issued by the following CSECTs:

DSNUCRVT, DSNUCRVA

**System Action:** Utility processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

**User Response:** Correct the 'resource unavailable' condition identified by the DSNT500I message. Either restart the utility from the last commit point or terminate the utility and start it again from the beginning. If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

**Problem Determination:** If the condition cannot be corrected, determine the failing environment. Refer to Section 3 of **Diagnosis Guide and Reference** for information on identifying and reporting the problem.

Collect the following diagnostic items listed in **Appendix B.**

**Problem determination** on page 1051 for an explanation of resource type codes.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

**Problem Determination:** If the condition cannot be corrected, determine the failing environment. Refer to Section 3 of **Diagnosis Guide and Reference** for information on identifying and reporting the problem.

Collect the following diagnostic items listed in **Appendix B.**

**Problem determination** on page 1051 for an explanation of resource type codes.

**Explanation:** DB2 failed during execution of the DSNIPSCB macro.

This aborted reason code is issued by the following CSECTs:
System Action: Utility processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

User Response: Correct the 'resource unavailable' condition identified by the DSNT500I message. Either restart the utility from the last commit point or terminate the utility and start it again from the beginning.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

Problem Determination: If the condition cannot be corrected, determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 5, 32, 46, 60, 61.

00E4010D

Explanation: The data manager subcomponent of DB2 failed during execution of the DSNISETH macro.

This abend reason code is issued by the following CSECTs:

- DSNUADP1
- DSNUADP2
- DSNUAHRI
- DSNUCL5
- DSNUPLGR
- DSNURRRI

System Action: Utility processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

User Response: Correct the 'resource unavailable' condition identified by the DSNT500I message. Either restart the utility from the last commit point or terminate the utility and start it again from the beginning.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

Problem Determination: If the condition cannot be corrected, determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 5, 32, 46, 60, 61.

00E4010E

Explanation: The data manager subcomponent of DB2 failed during execution of the DSNISRCF macro.

This abend reason code is issued by the following CSECT: DSNUCRVT

System Action: Utility processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

User Response: Correct the 'resource unavailable' condition identified by the DSNT500I message. Either restart the utility from the last commit point or terminate the utility and start it again from the beginning.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

Problem Determination: If the condition cannot be corrected, determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 5, 32, 46, 60, 61.
00E4010F
Explanation: The data manager subcomponent of DB2 failed during execution of the DSNIURBA macro.
This abend reason code is issued by the following CSECT: DSNULOG1
System Action: Utility processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.
User Response: Correct the ‘resource unavailable’ condition identified by the DSNT500I message. Either restart the utility from the last commit point or terminate the utility and start it again from the beginning.
If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.
Problem Determination: If the condition cannot be corrected, determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Collect the following diagnostic items listed in Appendix B, Problem determination on page 1051 1, 5, 32, 46, 60, 61.

00E40110
Explanation: The data space manager subcomponent of DB2 failed during execution of the reset of an index space or table space page set.
This abend reason code is issued by the following CSECTs: DSNULRS DSNUCRVA DSNUCTER
System Action: The utility job is abnormally terminated. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.
User Response: Correct the ‘resource unavailable’ condition identified by the DSNT500I message. Either restart the utility or terminate the utility and submit it again.
If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.
Problem Determination: If the condition cannot be corrected, determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Collect the following diagnostic items listed in Appendix B, Problem determination on page 1051 1, 2, 5, 32, 46, 61.

00E40111
Explanation: The data space manager subcomponent of DB2 failed during execution of the DSNPXTND macro.
This abend reason code is issued by the following CSECT: DSNUCBFW
System Action: The utility job is abended. DSM provides diagnostic information.
User Response: Notify the system programmer.

System Programmer Response: Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: This is an internal error.
Collect the following diagnostic items listed in Appendix B, Problem determination on page 1051 1, 5, 32, 46, 60, 61.

00E40112
Explanation: DSNUGMAP, a utilities program, failed.
This abend reason code is issued by the following CSECT: DSNUCBFW
System Action: The utility job step that caused the function to be requested is abended. The utility job is placed in the stopped state.
User Response: Notify the system programmer.
System Programmer Response: Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: This is an internal error.
Collect the following diagnostic items listed in Appendix B, Problem determination on page 1051 1, 5, 32, 46, 60, 61.

00E40113
Explanation: The data space manager subcomponent of DB2 failed during execution of the reset of an index space or table space page set.
This abend reason code is issued by the following CSECTs: DSNULRS DSNUCRVA DSNUCTER
System Action: The utility job is abnormally terminated. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.
User Response: Correct the ‘resource unavailable’ condition identified by the DSNT500I message and either restart the utility or terminate the utility and submit it again. If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that will give more information about the problem. Notify the system programmer.
System Programmer Response: If the condition identified cannot be corrected, determine the failing environment, and if you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: See message DSNT500I in this manual for a ‘resource unavailable’ condition.
Collect the following diagnostic items listed in Appendix B, Problem determination on page 1051 1, 2, 5, 32, 46, 61.

00E40114
Explanation: DB2 failed during execution of DSNICLPS.
This abend reason code is issued by the following CSECTs: DSNULRS DSNUCRVA DSNUGUIP
System Action: The utility job step that caused the function to be requested is abended. The utility job is placed in the stopped state.
User Response: Notify the system programmer.
System Programmer Response: Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: This is an internal error.

Collect the following diagnostic items listed in Appendix B.

**Problem determination** on page 1051

---

00E40115

Explanation: The data manager subcomponent of DB2 failed during execution of DSNIUSTP.

This abend reason code is issued by the following CSECTs:

DSNUCLVE DSNUCRVA DSNRUBXA DSNRUBXC

System Action: The utility job step that caused the function to be requested is abended. The utility job is placed in the stopped state.

User Response: Notify the system programmer.

System Programmer Response: Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: This is an internal error.

Collect the following diagnostic items listed in Appendix B.

**Problem determination** on page 1051

---

00E40116

Explanation: Either DSN3SYNC or DSN3ABRT failed.

This abend reason code is issued by the following CSECTs:

DSNUBCL0 DSNUCRVA DSNUCRV0

System Action: The utility job step that caused the function to be requested is abended. The utility job is placed in the stopped state.

User Response: Notify the system programmer.

System Programmer Response: Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: This is an internal error.

Collect the following diagnostic items listed in Appendix B.

**Problem determination** on page 1051

---

00E40117

Explanation: DSNURBXB, a utilities module, failed.

This abend reason code is issued by the following CSECT:

DSNUCLVL, DSNUCRVI

System Action: The utility job step that caused the function to be requested is abended. The utility job is placed in the stopped state.

User Response: Notify the system programmer.

System Programmer Response: Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: This is an internal error.

Collect the following diagnostic items listed in Appendix B.

**Problem determination** on page 1051

---

00E40118

Explanation: The data space manager subcomponent of DB2 failed during execution of the DSNPGNPO macro.

This abend reason code is issued by the following CSECT:

DSNUCRVA

System Action: The utility job is abended. The DSM provides any required diagnostic information, such as messages, dumps, or log records.

User Response: Notify the system programmer.

System Programmer Response: Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: This is an internal error.

---

00E40119

Explanation: This abend reason code is issued in these instances:

- During recovery, a full image copy was not found for the DB2 directory or the DB2 catalog table space.
- The MERGECOPY utility did not recognize a record from the SYSIBM.SYSCOPY catalog table.

This abend reason code is issued by the following CSECT:

DSNUBCLO

System Action: The utility job is abended.

Operator Response: Notify the system programmer.

System Programmer Response: Determine the failing environment. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: When the recovery of the DB2 catalog or directory table space is requested, make sure that a full image copy has been taken first. If the MERGECOPY utility abended, either issue a select statement or run the REPORT utility to check the SYSIBM.SYSCOPY table for invalid rows.

---

00E4011A

Explanation: An error occurred in the RECOVER utility while applying log with log RBA=0.

This abend reason code is issued by the following CSECTs:

DSNUCLVL, DSNUCRVL

System Action: The utility job is abended.

Operator Response: Notify the system programmer.

System Programmer Response: Determine the failing environment. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Make sure the SYSLOGRNX table space is not empty before applying the log.

Collect the following diagnostic items listed in Appendix B.

**Problem determination** on page 1051

---
**00E4011B**

**Explanation:** The data manager subcomponent of DB2 failed during the execution of DSNHDFM.

This abend reason code is issued by the following CSECTs: DSNUCRVA, DSNUCLVE

**System Action:** Utility processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be requested.

**User Response:** Correct the ‘resource unavailable’ condition identified by the DSNT500I message. Either restart the utility or terminate the utility and execute it from the beginning.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

**Problem Determination:** If the condition cannot be corrected, determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B on page 1051: 1, 2, 5.

---

**00E4011C**

**Explanation:** The log manager subcomponent of DB2 failed during execution of the DSNJLGR macro.

This abend reason code is issued by the following CSECTs: DSNULOG1, DSNULGGR

**System Action:** The utility job step that caused the function to be requested is abended. The utility job is placed in the stopped state.

**System Programmer Response:** Register 2 contains a secondary reason code. If the secondary reason code is not documented in this manual, it is an internal IBM code.

**Problem Determination:** If the condition cannot be corrected, determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B on page 1051: 1, 2, 5, 6, 16, 32, 33, 53, 60, 61.

---

**00E4011D**

**Explanation:** DB2 detected an error during execution of the DSNIDDRN macro. This is an internal error.

This abend reason code is issued by the following CSECT: DSNUBCKR

**System Action:** The utility job step that caused the function to be requested is abended. The utility job is placed in the stopped state.

**User Response:** Notify the system programmer.

**System Programmer Response:** Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B on page 1051: 1, 2, 4, 31, 32, 47, 50.

---

**00E4011F**

**Explanation:** The RECOVER utility is unable to clear the group buffer pool pending status.

**System Action:** The RECOVER utility abends with this code.

**Problem Determination:** Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B on page 1051: 1, 2, 5.

This abend reason code is issued by the following CSECT: DSNUCARS

---

**00E40120**

**Explanation:** A delete of SYSLGRNX information failed during -TERM UTILITY command processing for a REORG utility in the RELOAD phase.

This abend reason code is issued by the following CSECT: DSNUBCOP

**System Action:** Utility processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

**User Response:** Correct the ‘resource unavailable’ condition identified by the DSNT500I message. Either restart the utility from the last commit point or terminate the utility and start it again from the beginning.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

**Problem Determination:** If the condition cannot be corrected, determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B on page 1051: 1, 2, 5, 32, 46, 60, 61.

---

**00E40121**

**Explanation:** A RDJFCB macro invocation returned a nonzero return code.

This abend reason code is issued by the following CSECT: DSNUBCKB

**System Action:** Processing is abended.

**User Response:** This is probably a user error. A DD statement might be missing or specified incorrectly. If the DD statements appear to be correct, there might be another cause of the error and you should notify the system programmer.

**System Programmer Response:** Determine the failing environment. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The DD statement referred to by the COPYDDN Utility keyword might be missing or specified incorrectly. If COPYDDN was not specified, a DD statement with a default name equal to SYSCOPY must be present in the job step.
00E40122
Explanation: A IEFAB4UV invocation returned a nonzero return code.
This abend reason code is issued by the following CSECT: DSNUBCKB
System Action: Processing is abnormally terminated.
User Response: Notify the system programmer.
System Programmer Response: Determine the failing environment. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: This is an internal error.
Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 4, 5, 32, 46, 60, 61.
This abend reason code is issued by the following CSECTs: DSNUCALA, DSNUCAWR, DSNUCAWT.

00E40123
Explanation: The RECOVER TABLESPACE utility cannot access the SYSIBM.SYSVOLUMES catalog table to process a concurrent copy produced by the DFSS DUMP command.
System Action: The RECOVER TABLESPACE utility abends.
System Programmer Response: Resolve the access problem to the SYSVOLUMES catalog table. Then restart the RECOVER TABLESPACE utility.
Problem Determination: See the console for additional diagnostic messages.
Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 5.
This abend reason code is issued by the following CSECT: DSNUCADF.

00E40124
Explanation: A down level internal control block was detected.
System Action: The utility job step that requested the function is abandoned. The abend is accompanied by message DSNU424I.
User Response: Refer to the APAR mentioned in message DSNU424I.
System Programmer Response: Refer to the APAR mentioned in message DSNU424I.
Problem Determination: Refer to the APAR mentioned in message DSNU424I.
This abend reason code is issued by the following CSECT: DSNUBARR

00E40125
Explanation: The RECOVER utility was recovering an indexspace with index versioning active. The utility issued the DSNDBIXD macro which calls the Index Manager subcomponent. An error occurred while the Index Manager was building an internal control block.
System Action: The RECOVER INDEX/INDEXSPACE utility abends.
User Response: Notify the system programmer.
System Programmer Response: Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: This is an internal error.
Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 5, 32, 46, 60, 61.
This abend reason code is issued by the following CSECTs: DSNUDCAB, DSNUDBA, DSNUDCAW, DSNUDCAX.

00E40126
Explanation: The RECOVER utility was recovering an indexspace with index versioning active. The utility issued the DSNDBIXD macro which calls the Index Manager subcomponent. An error occurred while the Index Manager was building the Index Descriptor Page.
System Action: The RECOVER INDEX/INDEXSPACE utility abends.
User Response: Notify the system programmer.
System Programmer Response: Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: This is an internal error.
Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 5, 32, 46, 60, 61.
This abend reason code is issued by the following CSECTs: DSNUDCAX, DSNUDBA, DSNUDCAW, DSNUDCAX.

00E40163
Explanation: An error was detected during activity history recording insert of SYSIBM.SYSLGRNG or SYSLGRNX.
This abend reason code is issued by the following CSECT: DSNUAHR2
System Action: Processing is abended.
User Response: Notify the system programmer.
System Programmer Response: Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: This is an internal error.
Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 5, 32, 46, 60, 61.
This abend reason code is issued by the following CSECTs: DSNUDCAX, DSNUDBA, DSNUDCAW, DSNUDCAX.

00E40164
Explanation: An error was detected during activity history recording update of SYSIBM.SYSLGRNG or SYSLGRNX.
This abend reason code is issued by the following CSECT: DSNUAHR2
System Action: Processing is abended.
User Response: Notify the system programmer.
System Programmer Response: Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: This is an internal error.
Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 5, 32, 46, 60, 61.
**00E40165**

**Explanation:** An error was detected during an execution unit switch while performing application history recording or drop processing.

This abend reason code is issued by the following CSECTs: DSNUAHR1, DSNUADP1

**System Action:** Processing is abended.

**User Response:** Notify the system programmer.

**System Programmer Response:** Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** This is an internal error.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 5, 32, 46, 60, 61.

---

**00E40166**

**Explanation:** A delete of SYSIBM.SYSLGRNX information failed during DROP processing.

This abend reason code is issued by the following CSECT: DSNUADP2

**System Action:** Utility processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

**User Response:** Correct the 'resource unavailable' condition identified by the DSNT500I message. Either restart the utility from the last commit point or terminate the utility and start it again from the beginning.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

**Problem Determination:** If the condition cannot be corrected, determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 5, 32, 46, 60, 61.

---

**00E40167**

**Explanation:** A delete of SYSIBM.SYSCOPY information failed during DROP processing.

This abend reason code is issued by the following CSECT: DSNUADP1

**System Action:** Processing is abended.

**User Response:** Notify the system programmer.

**System Programmer Response:** Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** This is an internal error.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 5, 32, 46, 60, 61.

---

**00E40168**

**Explanation:** The buffer manager (BM) subcomponent of DB2 failed during the execution of the DSNBPFPP macro.

This abend reason code is issued by the following CSECT: DSNUCRVA

**System Action:** The utility job step that caused the function to be requested is abended. The utility job is placed in the stopped state.

**User Response:** Notify the system programmer.

**System Programmer Response:** Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** This is a DB2 subsystem internal error.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 5, 32, 46, 60, 61.

---

**00E40170**

**Explanation:** The COPY or RECOVER utility was executing in PARALLEL mode. An error occurred in the data transport mechanism while data was being transferred between the batch and the online DB2 address spaces.

**System Action:** The COPY or RECOVER utility abends.

**User Response:** Notify the system programmer.

**System Programmer Response:** Determine the failing environment. Refer to Section 3 of Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** This is an internal error.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 5, 32, 46, 60, 61.

This abend reason code is issued by the following CSECTs: DSNUBBOP, DSNUCAWT.

---

**00E40189**

**Explanation:** An error was detected while inserting records from SYSIBM.SYSCOPY.

This abend reason code is issued by the following CSECT: DSNUBINS

**System Action:** Utility processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be requested.

**User Response:** Correct the 'resource unavailable' condition identified by the DSNT500I message. Either restart the utility from the last commit point, or terminate the utility and start it again from the beginning.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

**Problem Determination:** If the condition cannot be corrected, determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
00E40190

**Explanation:** An error was detected while scanning the SYSIBM.SYSCOPY catalog table.

This abend reason code is issued by the following CSECTs: DSNMDELS DSNUBAUS

**System Action:** Utility processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be requested.

**User Response:** Correct the ‘resource unavailable’ condition identified by the DSNT500I message. Either restart the utility from the last commit point or terminate the utility and start it again from the beginning.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

**Problem Determination:** If the condition cannot be corrected, determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

00E40191

**Explanation:** An error was detected while deleting records from SYSIBM.SYSCOPY.

This abend reason code is issued by the following CSECT: DSNUMDEL

**System Action:** Utility processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be requested.

**User Response:** Correct the ‘resource unavailable’ condition identified by the DSNT500I message. Either restart the utility from the last commit point or terminate the utility and start it again from the beginning.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

**Problem Determination:** If the condition cannot be corrected, determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

00E40192

**Explanation:** An invalid call to DSNULOG1 was detected when a partial recovery function in DSNULOG1 was invoked. The passed parameter is not a TOCOPY or TORBA to SYSCOPY, SYSUTILX, or DSNDB01.

This abend reason code is issued by the following CSECTs: DSNULOG1 DSNUBAUS

**System Action:** Utility processing is abended.

**User Response:** Notify the system programmer.

**System Programmer Response:** Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

00E40193

**Explanation:** An error was detected while running a utility with the SHRLEVEL CHANGE option.

This abend reason code is issued by the following CSECTs: DSNUKINT DSNUGTBN DSNUGPAR

**System Action:** The utility job is abended. A SYSABEND dump of batch storage and an SVC dump of the database services storage are requested.

**User Response:** Notify the system programmer.

**System Programmer Response:** Determine the failing environment.

**Problem Determination:** Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B.

*Problem determination* on page 1051 1, 5, 32, 60, 61.

00E40194

**Explanation:** This is an internal error. An error was detected running the COPY utility with the SHRLEVEL CHANGE option.

**System Action:** The utility job step that requested the function is abended. The utility job is placed in the stopped state.

**User Response:** Notify the system programmer.

**System Programmer Response:** Determine the failing environment.

**Problem Determination:** Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B.

*Problem determination* on page 1051 1, 2, 4, 5, 32.

This abend reason code is issued by the following CSECT: DSNUBAID

00E40195

**Explanation:** This is an internal error. An error was detected running the COPY utility with the SHRLEVEL CHANGE option.

**System Action:** The utility job step that requested the function is abended. The utility job is placed in the stopped state.

**User Response:** Notify the system programmer.

**System Programmer Response:** Determine the failing environment.

**Problem Determination:** Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B.

*Problem determination* on page 1051 1, 2, 4, 5, 32.

This abend reason code is issued by the following CSECT: DSNUBAID
00E40201
Explanation: RUNSTATS was unable to reposition and continue processing after a COMMIT.

This abend reason code is issued by the following CSECTs: DSNUSIDX, DSNUSTBL

System Action: Utility processing is abended.

User Response: Notify the system programmer.

System Programmer Response: Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: This is an internal error. Collect the following diagnostic items listed in Appendix B.

"Problem determination" on page 1051 1, 5, 32, 46, 60, 61.

00E40202
Explanation: An error was detected while scanning a table space or index during RUNSTATS processing.

This abend reason code is issued by the following CSECTs: DSNUSIDX, DSNUSTBL

System Action: Utilities processing is abended.

User Response: If message DSNT500I was issued, assure that the indicated resource is available and resubmit the job, otherwise notify the system programmer.

System Programmer Response: If message DSNT500I was issued, refer to the description of the message in "DSNT... Messages" on page 315, otherwise, this is an internal error. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: This is an internal error.

Collect the following diagnostic items listed in Appendix B.

"Problem determination" on page 1051 1, 5, 32, 46, 60, 61.

00E40203
Explanation: An error was detected in a parameter list passed to the RUNSTATS message-formatting routine.

This abend reason code is issued by the following CSECT: DSNUSMSG

System Action: Utilities processing is abended.

User Response: Notify the system programmer.

System Programmer Response: Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: This is an internal error.

Collect the following diagnostic items listed in Appendix B.

"Problem determination" on page 1051 1, 5, 32, 46, 60, 61.

00E40204
Explanation: An error was detected while attempting to locate the PB0 control block for a table space partition.

This abend reason code is issued by the following CSECT: DSNUSTBL

System Action: Utilities processing is abended.

User Response: Notify the system programmer.

System Programmer Response: Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: This is an internal error. Collect the following diagnostic items listed in Appendix B.

"Problem determination" on page 1051 1, 5, 32, 46, 60, 61.

00E40205
Explanation: An error was returned from COMMIT or ABORT processing during RUNSTATS.

This abend reason code is issued by the following CSECTs: DSNUSDB DSNUSIDX DSNUSTBL

System Action: Utilities processing is abended.

User Response: Notify the system programmer.

System Programmer Response: Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: This is an internal error.

Collect the following diagnostic items listed in Appendix B.

"Problem determination" on page 1051 1, 5, 32, 46, 60, 61.

00E40206
Explanation: An error was detected while updating the statistics in the SYSIBM.SYSCOLUMNS catalog table.

This abend reason code is issued by the following CSECTs: DSNUSCT1, DSNUSUCO

System Action: Utilities processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

User Response: Correct the 'resource unavailable' condition identified by the DSNT500I message, terminate the utility and start it again from the beginning.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

Problem Determination: If the condition cannot be corrected, determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B.

"Problem determination" on page 1051 1, 5, 32, 46.

00E40207
Explanation: An error was detected while updating the statistics in the SYSIBM.SYSCSINDEXES Catalog table.

This abend reason code is issued by the following CSECTs: DSNUSCT2, DSNUSUIX

System Action: Utilities processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

User Response: Correct the 'resource unavailable' condition identified by the DSNT500I message, terminate the utility and start it again from the beginning.
If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

**Problem Determination:** If the condition cannot be corrected, determine the failing environment. Refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B for information on identifying problem determination:

```
Problem determination” on page 1051
```

---

**00E40208**

**Explanation:** An error was detected while updating the statistics in the SYSIBM.SYSINDEXPART Catalog table.

This abend reason code is issued by the following CSECTs: DSNUSCT3, DSNUSUIP

**System Action:** Utilities processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

**User Response:** Correct the 'resource unavailable' condition identified by the DSNT500I message, terminate the utility and start it again from the beginning.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

**Problem Determination:** If the condition cannot be corrected, determine the failing environment. Refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B for information on identifying problem determination:

```
Problem determination” on page 1051
```

---

**00E40209**

**Explanation:** An error was detected while updating the statistics in the SYSIBM.SYSTABLESPACE Catalog table.

This abend reason code is issued by the following CSECTs: DSNUSCT4, DSNUSUSTP

**System Action:** Utilities processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

**User Response:** Correct the 'resource unavailable' condition identified by the DSNT500I message, terminate the utility and start it again from the beginning.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

**Problem Determination:** If the condition cannot be corrected, determine the failing environment. Refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B for information on identifying problem determination:

```
Problem determination” on page 1051
```

---

**00E40210**

**Explanation:** An error was detected while updating the statistics in the SYSIBM.SYSTABLESPACE Catalog table.

This abend reason code is issued by the following CSECTs: DSNUSCT6, DSNUSUSUT

**System Action:** Utilities processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

**User Response:** Correct the 'resource unavailable' condition identified by the DSNT500I message, terminate the utility and start it again from the beginning.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

**Problem Determination:** If the condition cannot be corrected, determine the failing environment. Refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B for information on identifying problem determination:

```
Problem determination” on page 1051
```

---

**00E40211**

**Explanation:** An error was detected while updating the statistics in the SYSIBM.SYSTABLESPACE Catalog table.

This abend reason code is issued by the following CSECTs: DSNUSCT6, DSNUSUSUTS

**System Action:** Utilities processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

**User Response:** Correct the 'resource unavailable' condition identified by the DSNT500I message, terminate the utility and start it again from the beginning.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

**Problem Determination:** If the condition cannot be corrected, determine the failing environment. Refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B for information on identifying problem determination:

```
Problem determination” on page 1051
```

---

**00E40212**

**Explanation:** A 'resource unavailable' condition was detected while attempting to access a catalog table during RUNSTATS processing.

This abend reason code is issued by the following CSECT: DSNUSVAL

**System Action:** Utility processing is abended. The abend will be accompanied by message DSNT500I. An SDUMP might be taken.

**User Response:** Correct the 'resource unavailable' condition identified by the DSNT500I message and restart the utility. If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that will give more information about the problem. Notify the system programmer.

Collect the following diagnostic items listed in Appendix B for information on identifying problem determination:

```
Problem determination” on page 1051
```

---
Operator Response: Notify the system programmer.

System Programmer Response: If the condition identified cannot be corrected, determine the failing environment and if you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: See message DSNT500I in this manual. See the secondary reason code from register 2, also in this manual. Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 5, 32, 46, 60, 61.

00E40213

Explanation: An error was detected while updating the statistics in the SYSIBM.SYSCOLDIST catalog table.

This abend reason code is issued by the following CSECT: DSNUSUCD

System Action: Utilities processing is abended. Message DSNT500I might accompany this abend. An SDUMP might be taken.

User Response: Correct the ‘resource unavailable’ condition identified by the DSNT500I message, terminate the utility, and start it again from the beginning. If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code. Notify the system programmer.

System Programmer Response: If the condition identified cannot be corrected, determine the failing environment. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 3, 4, 5, 32, 46.

00E40214

Explanation: An error was detected while updating the statistics in the SYSIBM.SYSTABSTATS catalog table.

This abend reason code is issued by the following CSECTs: DSNUSUPT DSNUSATS

System Action: Utilities processing is abended. Message DSNT500I might accompany this abend. An SDUMP might be taken.

User Response: Correct the ‘resource unavailable’ condition identified by the DSNT500I message, terminate the utility, and start it again from the beginning. If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code. Notify the system programmer.

System Programmer Response: If the condition identified cannot be corrected, determine the failing environment. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 3, 4, 5, 32, 46.

00E40215

Explanation: An error was detected while updating the statistics in the SYSIBM.SYSINDEXSTATS catalog table.

This abend reason code is issued by the following CSECTs: DSNUSUPI DSNUSAIX DSNUSACD

System Action: Utilities processing is abended. Message DSNT500I might accompany this abend. An SDUMP might be taken.

User Response: Correct the ‘resource unavailable’ condition identified by the DSNT500I message, terminate the utility, and start it again from the beginning. If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code. Notify the system programmer.

System Programmer Response: If the condition identified cannot be corrected, determine the failing environment. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 3, 4, 5, 32, 46.

00E40216

Explanation: An error was detected while updating the statistics in the SYSIBM.SYSCOLDISTSTATS catalog table.

This abend reason code is issued by the following CSECTs: DSNUSUPC DSNUSACO

System Action: Utilities processing is abended. Message DSNT500I might accompany this abend. An SDUMP might be taken.

User Response: Correct the ‘resource unavailable’ condition identified by the DSNT500I message, terminate the utility, and start it again from the beginning. If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code. Notify the system programmer.

System Programmer Response: If the condition identified cannot be corrected, determine the failing environment. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 1, 3, 4, 5, 32, 46.

00E40217

Explanation: An error was detected while updating the statistics in the SYSIBM.SYSINDEXSTATS catalog table.

This abend reason code is issued by the following CSECTs: DSNUSUPD DSNUSACD

System Action: Utilities processing is abended. Message DSNT500I might accompany this abend. An SDUMP might be taken.

User Response: Correct the ‘resource unavailable’ condition identified by the DSNT500I message, terminate the utility, and start it again from the beginning. If DSNT500I was not issued,
register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code. Notify the system programmer.

System Programmer Response: If the condition identified cannot be corrected, determine the failing environment. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 3, 4, 5, 32, 46.

00E40218

Explanation: An error was detected while updating the statistics in the SYSIBM.SYSLOBSTATS Catalog table.

This abend reason code is issued by the following CSECTs: DSNUSLOB

System Action: Utilities processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

User Response: Correct the ‘resource unavailable’ condition identified by the DSNT500I message, terminate the utility and start it again from the beginning.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

Problem Determination: If the condition cannot be corrected, determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 3, 4, 5, 32, 46.

00E40220

Explanation: An error was detected while accessing the SYSIBM.SYSTOSTGROUP catalog table during STOSPACE processing.

This abend reason code is issued by the following CSECT: DSNUTSSA

System Action: Utility processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

User Response: Correct the ‘resource unavailable’ condition identified by the DSNT500I message. Either restart the utility from the last commit point or terminate the utility and start it again from the beginning.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

Problem Determination: If the condition cannot be corrected, determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 5, 32, 46, 60, 61.

00E40222

Explanation: An error was detected while accessing the SYSIBM.SYNSINDEXPART catalog table during STOSPACE processing.

This abend reason code is issued by the following CSECT: DSNUTSSA

System Action: Utility processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

User Response: Correct the ‘resource unavailable’ condition identified by the DSNT500I message. Either restart the utility from the last commit point or terminate the utility and start it again from the beginning.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

Problem Determination: If the condition cannot be corrected, determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 5, 32, 46, 60, 61.

00E40223

Explanation: An error was detected while accessing the SYSIBM.SYSTABLESPACE catalog table.

This abend reason code is issued by the following CSECTs: DSNUTSSA, DSNUKINP

System Action: Utility processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

User Response: Correct the ‘resource unavailable’ condition identified by the DSNT500I message. Either restart the utility
from the last commit point or terminate the utility and start it again from the beginning.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

**Problem Determination:** If the condition cannot be corrected, determine the failing environment. Refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 5, 32, 46, 60, 61.

---

**00E40224**

**Explanation:** An error was detected while accessing the SYSIBM.SYSINDEXES catalog table during STOSPACE processing.

This abend reason code is issued by the following CSECT: DSNUTSSA

**System Action:** Utility processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

**User Response:** Correct the 'resource unavailable' condition identified by the DSNT500I message. Either restart the utility from the last commit point or terminate the utility and start it again from the beginning.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

**Problem Determination:** If the condition cannot be corrected, determine the failing environment. Refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 5, 32, 46, 60, 61.

---

**00E40300**

**Explanation:** An error occurred in END INDEX LOAD processing following a sequence of index entry loads.

This abend reason code is issued by the following CSECTs: DSNURBXA, DSNURBXC

**System Action:** The utility job is abended. A SYSABEND dump of batch storage is requested.

**User Response:** Notify the system programmer.

**System Programmer Response:** Determine the failing environment. Refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** This is an internal error.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 5, 32, 46, 60, 61.

---

**00E40301**

**Explanation:** An error was encountered while attempting to obtain the high used RBA for the data sets associated with the table space being reorganized.

This abend reason code is issued by the following CSECT: DSNURFIT

**System Action:** Processing abnormally terminates.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Determine the reason the high used RBA could not be obtained, correct the situation, and restart the utility.

**Problem Determination:** The data sets associated with the table space being reorganized must be opened in order to obtain the high used RBA. Ensure that the data sets are available and can be opened by the utility.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 5.

---

**00E40302**

**Explanation:** An error occurred while attempting to force a page set closed.

This abend reason code is issued by the following CSECTs: DSNURBXA DSNURBXB DSNURCLP DSNURBXC

**System Action:** The utility job is abended. A SYSABEND dump of batch storage is requested.

**User Response:** Notify the system programmer.

**System Programmer Response:** Determine the failing environment. Refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** This is an internal error.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 5, 32, 46, 60, 61.
00E40303
Explanation: An attempt was made to access the SYSIBM.SYINDEXES catalog table to retrieve the NAME, CREATOR, TBNNAME and TBCREATOR. An error was returned from the DSNNXKACC protocol used to access SYSIBM.SYINDEXES.
This abend reason code is issued by the following CSECTs: DSNUGIXN, DSNUKINT
System Action: The utility job is abended. Unless a ‘resource unavailable’ condition was indicated, a SYSABEND dump of batch storage is requested.
User Response: If a ‘resource unavailable’ message was issued, refer to the description for that message. If the unavailable resource becomes available, the utility step is restartable.
System Programmer Response: Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference information on identifying and reporting the problem.
Problem Determination: This might be an internal error.
Collect the following diagnostic items listed in Appendix B.
Problem determination on page 1051] 1, 5, 32, 46, 60, 61.

00E40304
Explanation: An error occurred during key/RID pair delete processing for a nonclustering index.
This abend reason code is issued by the following CSECT: DSNURBXA
System Action: The utility job is abended. A SYSABEND dump of batch storage is requested.
User Response: Notify the system programmer.
System Programmer Response: Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference information on identifying and reporting the problem.
Problem Determination: This is an internal error.
Collect the following diagnostic items listed in Appendix B.
Problem determination on page 1051] 1, 5, 32, 46, 60, 61.

00E40305
Explanation: An error occurred during the reset of an index space or table space page set or page set partition.
This abend reason code is issued by the following CSECTs: DSNURBXC, DSNUGRST
System Action: The utility job is abended. The abend may be accompanied by message DSNT500I. The DSNT500I may be preceded by other related messages on the console. An SDUMP may be taken.
User Response: Correct the 'resource unavailable' condition identified by the DSNT500I message and either restart the utility or terminate the utility and submit it again. If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that will give more information about the problem. Notify the system programmer.
System Programmer Response: If the condition identified cannot be corrected, determine the failing environment, and if you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference information on identifying and reporting the problem.
Problem Determination: This is an internal error.
Collect the following diagnostic items listed in Appendix B.
Problem determination on page 1051] 1, 5, 32, 46, 60, 61.

00E40306
Explanation: An error occurred during a locate or create PSCB for a table space or index space page set.
This abend reason code is issued by the following CSECTs: DSNURBXB, DSNURBXC
System Action: The utility job is abended. A SYSABEND dump of batch storage is requested.
User Response: Notify the system programmer.
System Programmer Response: Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference information on identifying and reporting the problem.
Problem Determination: This is an internal error.
Collect the following diagnostic items listed in Appendix B.
Problem determination on page 1051] 1, 5, 32, 46, 60, 61.

00E40307
Explanation: An error occurred during the creation of a dynamic cursor block (CUB) for a table space or index space page set.
This abend reason code is issued by the following CSECT: DSNURBXB
System Action: The utility job is abended. A SYSABEND dump of batch storage is requested.
User Response: Notify the system programmer.
System Programmer Response: Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference information on identifying and reporting the problem.
Problem Determination: This is an internal error.
Collect the following diagnostic items listed in Appendix B.
Problem determination on page 1051] 1, 5, 32, 46, 60, 61.

00E40308
Explanation: An error occurred while attempting to allocate or deallocate storage for the table space record buffer.
This abend reason code is issued by the following CSECT: DSNURBXB
System Action: The utility job is abended. A SYSABEND dump of batch storage is requested.
User Response: Notify the system programmer.
System Programmer Response: Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference information on identifying and reporting the problem.
Problem Determination: This is an internal error.
Collect the following diagnostic items listed in Appendix B.
Problem determination on page 1051] 1, 5, 32, 46, 60, 61.
00E4030A
Explanation: A mismatch was found between the total number of keys processed during the current phase and the total number of keys expected to be processed in this phase.

System Action: The utility job is abnormally terminated, and all target objects are placed in rebuild pending state. Message DSNU255I was issued earlier to report both the keys processed and the keys expected. A dump is requested.

User Response: TERM the utility and re-access the indexes by using the REPAIR utility to reset the rebuild pending states on indexes. Run the CHECK INDEX utility to determine if any of the affected indexes are inconsistent. Inconsistent indexes may be recovered by the REBUILD INDEX or RECOVER INDEX utility.

System Programmer Response: Determine the failing environment. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference information on identifying and reporting the problem.

Problem Determination: If working data set was manipulated by user during restart process, make sure it was handled properly.

Collect the following diagnostic items listed in Appendix B.

''Problem determination on page 1051'' 1, 2, 4, 5, 32, 46.

00E4030B
Explanation: A mismatch was found between the total number of records processed during the current phase and the total number of records expected to be processed in this phase.

System Action: The utility job is abnormally terminated, all target objects are placed in rebuild pending state. Message DSNU254I was issued earlier to report both of the records processed and the records expected. A dump is requested.

User Response: Notify the system programmer. Table space can be rebuilt by REBUILD utility.

System Programmer Response: Determine the failing environment. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference information on identifying and reporting the problem.

Problem Determination: Make sure that the unload data set was handled correctly.

Collect the following diagnostic items: listed in Appendix B.

''Problem determination on page 1051'' 1, 2, 4, 5, 32, 46.

00E4030C
Explanation: An internal error occurred while building the dictionary.

System Programmer Response: Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items: listed in Appendix B.

''Problem determination on page 1051'' 1, 2, 4, 5, 32, 46.

00E4030D
Explanation: A LOAD or REORG utility detected an index that was potentially in a physically inconsistent state, which prohibited the LOAD or REORG utility from completing its processing for that index.

System Action: The utility job is abended. No SYSABEND dump or SVC dump is requested.

User Response: If the abend occurred during REORG utility processing, all indexes that were not built must be rebuilt using the DB2 Rebuild Index utility. To determine which indexes did not complete processing, use the DB2 -DISPLAY DATABASE command with the SPACENAM and RESTRICT options. Indexes that have not completed processing are in a "RPD" (rebuild pending) or "PSRBD" (page set rebuild pending) state. Terminate the failed REORG utility using the DB2 -TERM UTIL command. Submit a job to rebuild the inconsistent indexes using the DB2 REBUILD or RECOVER INDEX utility.

If the abend occurred during LOAD utility processing, the data might need to be rebuilt if one or more of the indexes not built is unique. In that case, rebuilding the indexes without first rebuilding the data could cause error messages for duplicate keys to be issued during the REBUILD utility processing.

Problem Determination: Message DSNU548I is issued before this abend and specifies which index was in a "PSRDB" (page set rebuild pending) state. The LOAD or REORG utility could not process an index in such a state and abnormally terminated. "PSRDB" is set for secondary indexes of a partitioned table space and indicates that the index might be physically inconsistent. This occurs when a DB2 utility physically alters such an index during utility processing (that is, during the build process for that index). If the utility is unable to complete that process, the index is left in the 'PSRDB' state and must be rebuilt before DB2 can use it.
Explanation: In REORG with SHRLEVEL CHANGE, during processing of the log, a log record is inconsistent with the table that maps between old and new RIDs. Specifically, one of these is true:

- The log record implies that before an update, the data record was a pointer data record, but the mapping table implies that the data record was a regular or overflow data record.
- The log record implies that before an update, the data record was a regular or overflow data record, but the mapping table implies that the data record was a pointer data record.

This abend reason code is issued by the following CSECT: DSNURLXL

System Action: The utility job step that caused the function to be requested abends. The utility job is placed in the stopped state.

System Programmer Response: This is an internal error. Determine the failing environment. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051, 1, either 2 or 4 (depending on whether the ABEND is issued from DSNUTILA or DSNUTILB), 5, 32, 46, 60, 61.

Explanation: An error occurred during the restart of a LOAD or REORG utility execution. An appropriate error message is issued.

This abend reason code is issued by the following CSECTs: DSNURELD, DSNURULD

System Action: The utility is abended. A SYSABEND dump of batch storage is requested.

User Response: Respond to the error message issued prior to the abend by making the correction in the input as indicated. Then restart the LOAD or REORG utility execution.

Problem Determination: Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051, 1, 5, 32, 46, 60, 61.

Explanation: An error occurred during commit processing.

This abend reason code is issued by the following CSECTs: DSNUK001, DSNUPREC, DSNUPSS, DSNURELD

System Action: The utility is abended. A SYSABEND dump of batch storage is requested.

User Response: Notify the system programmer.

Problem Determination: This is an internal error. Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051, 1, 5, 32, 46, 60, 61.

Explanation: An error occurred during abort processing.

This abend reason code is issued by the following CSECTs: DSNURELD, DSNURULD

System Action: The utility is abended. A SYSABEND dump of batch storage is requested.

User Response: Notify the system programmer.

Problem Determination: This is an internal error. Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051, 1, 5, 32, 46, 60, 61.

Explanation: An error occurred while the first or next key entry was being retrieved from an index.

This abend reason code is issued by the following CSECTs: DSNUKGET, DSNURBXC, DSNURCRI, DSNURFB

System Action: The utility job is abended. A SYSABEND dump of batch storage is requested.

User Response: Notify the system programmer.
System Programmer Response: Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: This is an internal error.

Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051 1, 5, 32, 46, 60, 61.

00E40314
Explanation: An error occurred while repositioning the cursor block (CUB). The error occurred at the location defined by the record identifier (RID) of the last table space record that was retrieved.

This abend reason code is issued by the following CSECT: DSNURFBIR

System Action: The utility job is abended. A SYSABEND dump of batch storage is requested.

User Response: Notify the system programmer.

System Programmer Response: Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: This is an internal error.

Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051 1, 5, 32, 46, 60, 61.

00E40315
Explanation: An error occurred while repositioning the main cursor block (CUB). The error occurred at the location defined by the record identifier (RID) of the last table space record that was retrieved.

This abend reason code is issued by the following CSECT: DSNURBR

System Action: The utility job is abended. A SYSABEND dump of batch storage is requested.

User Response: Notify the system programmer.

System Programmer Response: Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: This is an internal error.

Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051 1, 5, 32, 46, 60, 61.

00E40316
Explanation: An error occurred while the first or next record entry was being retrieved from a table space.

This abend reason code is issued by the following CSECTs: DSNURFBR, DSNURWES, DSNUKICK, DSNUCRUL

System Action: The utility job is abended. A SYSABEND dump of batch storage is requested.

User Response: Notify the system programmer.

System Programmer Response: Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: This is an internal error.

Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051 1, 5, 32, 46, 60, 61.

00E40317
Explanation: An object descriptor block (OBD) could not be found for the OBID associated with the object descriptor.

This abend reason code is issued by the following CSECTs: DSNURLXL, DSNUnnnn

‘nnnn’ is the CSECT name identifier given in VRARRK5 of the VRA in the SDWA. DSNUnnnn is the full CSECT name given in the dump title.

System Action: The utility job is abended. A SYSABEND dump of batch storage is requested.

User Response: Notify the system programmer.

System Programmer Response: Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: This is an internal error.

Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051 1, 5, 32, 46, 60, 61.

00E40318
Explanation: An error occurred while preparing for or ending a series of data record loads or while attempting a data record load.

This abend reason code is issued by the following CSECTs: DSNURWBF, DSNUGTER

System Action: The utility job is abended.

User Response: Notify the system programmer.

System Programmer Response: Determine the failing environment. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051 1, 5, 32, 46, 60, 61.

00E40319
Explanation: An error occurred while retrieving information from the SYSIBM.SYSTABLES catalog table.

This abend reason code is issued by the following CSECT: DSNURWIR

System Action: The utility job is abended. A SYSABEND dump of batch storage is requested.

User Response: Notify the system programmer.

System Programmer Response: Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: This is an internal error.

Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051 1, 5, 32, 46, 60, 61.
00E4031A

Explanation: One or more broken pages were detected in the shadow data set while copying pages for the inline copy during REORG TABLESPACE SHRLEVEL(CHANGE).
Message DSNU518I in the job output identifies each broken page.

This abend reason code is issued by the following CSECT: DSNURCCP

System Action: The utility job is abended. An SDUMP of the ssnDBM1 address space is requested.

User Response: Notify the system programmer.

System Programmer Response: Determine the failing environment. Refer to Section 3 of Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: This is an internal error. Collect the following diagnostic items listed in Appendix B, "Problem Determination" on page X-5: 1, 2, 5, 32, 37, 47, 50, 64, 66, 72, 86, 87.

00E4031B

Explanation: For the area (table space or partition) being reorganized, REORG with SHRLEVEL REFERENCE or CHANGE unloads data from the original data sets and reloads data into shadow data sets. REORG then exchanges the names of the original and shadow data sets, using temporary names during the renaming. The original name of a data set is in the form "catname.DSNDBx.dbname.psnme.I0001.Annn."
The shadow name of a data set is in the form "catname.DSNDBx.dbname.psnme.S0001.Annn."
The temporary name of a data set is in the form "catname.DSNDBx.dbname.psnme.T0001.Annn."

REORG uses such data sets for indexes as well as data.

To exchange the names of the original and shadow data sets, REORG performs the following renaming:

1. In the switch phase, it renames the original data set from the original name to the temporary name
2. In the switch phase, it renames the shadow data set from the temporary name to the original name
3. In the utilterm phase, it renames the original data set from the temporary name to the shadow name (for user-managed data sets). It deletes the temporary for DB2-managed data sets.

This abend code means that during the switch phase of REORG, one of these errors was detected:

1. On rename 1, a data set with a temporary name already exists.
2. On rename 2, a data set with an original name already exists.

These error conditions can arise for a DB2-managed or user-managed data set.

Message DSNU360I also appears, with the name of the data set and with a context code of 1, or 2.

This abend reason code is issued by the following CSECT: DSNURRRM.

System Action: The utility job step that caused the function to be requested abends. The utility job is placed in the stopped state.

User Response: Take one of the following actions:

- Delete the data set and then restart the utility.
- TERM the utility. Delete the data set before trying to execute REORG again with SHRLEVEL REFERENCE or CHANGE.

00E4031C

Explanation: For the area (table space or partition) being reorganized, REORG with SHRLEVEL REFERENCE or CHANGE unloads data from the original data sets and reloads data into shadow data sets. REORG then exchanges the names of the original and shadow data sets, using temporary names during the renaming. The original name of a data set is in the form "catname.DSNDBx.dbname.psnme.I0001.Annn."
The shadow name of a data set is in the form "catname.DSNDBx.dbname.psnme.S0001.Annn."
The temporary name of a data set is in the form "catname.DSNDBx.dbname.psnme.T0001.Annn."

REORG uses such data sets for indexes as well as data.

To exchange the names of the original and shadow data sets, REORG performs the following renaming:

1. In the switch phase, it renames the original data set from the original name to the temporary name
2. In the switch phase, it renames the shadow data set from the shadow name to the original name
3. In the utilterm phase, it renames the original data set from the temporary name to the shadow name (for user-managed data sets). It deletes the temporary for DB2-managed data sets.

If a -TERM UTILITY is issued after any renaming, the -TERM UTILITY undoes the renaming that the REORG performed by renaming:

4. The original data set from the shadow name to the temporary name
5. The shadow data set from the original name to the shadow name
6. The original data set from the temporary name to the original name

During REORG, or during -TERM UTILITY, an attempt to rename a data set failed due to a system problem. This error condition can arise for a DB2-managed or user-managed data set.

Message DSNP027I also appears, with the old and new names of the data set and with other information.

This abend reason code is issued by the following CSECT: DSNURRRM.

System Action: The job step that caused the function to be requested abends. The utility job or the -TERM UTILITY command is placed in the stopped state.

User Response: If this condition arises during renaming 1, 2, or 3, you can correct the problem. Choose between these actions:

- Correct the problem and then RESTART the utility.
- TERM the utility.

If this condition arises during renaming 1, 2, or 3, and you cannot correct the problem, TERM the utility and notify the system programmer.

If this condition arises during renaming 4, 5, or 6, notify the system programmer.
System Programmer Response:  This is an internal error. Determine the failing environment. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination:  Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 3, 4, 5, 10, 12, 32. Also, collect the information that appears with message DSNP027I.

00E40320

Explanation:  A failure occurred while attempting to restart the RELOAD phase of the LOAD or REORG utility.

This abend reason code is issued by the following CSECT: DSNURWUC

System Action:  The utility job is abended. A SYSABEND dump of batch storage is requested.

User Response:  Notify the system programmer.

System Programmer Response:  Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination:  This is an internal error.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 5, 32, 46, 60, 61.

00E40321

Explanation:  An error occurred while retrieving information from the SYSIBM.SYSCOLUMNS catalog table.

This abend reason code is issued by the following CSECTs: DSNUKINE DSNUROFL DSNUCBRK

System Action:  The utility job is abended. A SYSABEND dump of batch storage is requested.

User Response:  Notify the system programmer.

System Programmer Response:  Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination:  This is an internal error.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 5, 32, 46, 60, 61.

00E40322

Explanation:  An error occurred while attempting to add an entry to an index.

This abend reason code is issued by the following CSECT: DSNURBXA

System Action:  Processing of the index for which the error occurred is terminated. The index is internally identified as an unavailable resource. A utility error message identifies the index for which the error occurred. An SVC dump of the database services storage is requested but will be suppressed if a previous ‘resource unavailable’ message has been issued to document the condition. The processing of index entries for other indexes proceeds.

User Response:  Notify the system programmer.

System Programmer Response:  Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination:  This is an internal error.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 5, 32, 46, 60, 61.

00E40323

Explanation:  An error occurred during the execution of a LOAD or REORG utility. Prior to this abend, error messages identifying the specific problem were issued. The abend is issued so that work data sets, which will be needed if the utility is restarted, are saved.

This abend reason code is issued by the following CSECTs: DSNURELD DSNURWBF DSNURBXD DSNURVIX

System Action:  Utility processing is abended. No SYSABEND dump or SVC dump is requested.

User Response:  Respond to the error messages issued prior to the abend. Correct the input and either -TERM the utility and resubmit it or resubmit the utility with the RESTART parameter. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination:  When work data sets are used and the disposition is MOD, DELETE, and CATLG, (DISP=(MOD,DELETE,CATLG)), this abend still allows you to restart the utility. Refer to the prior error messages to determine how to correct the problem.

00E40324

Explanation:  An error occurred during the construction of an index entry. The error occurred while extracting the key from the table space.

This abend reason code is issued by the following CSECT: DSNURBXB

System Action:  The utility job is abended. A SYSABEND dump of batch storage and an SVC dump of the database services storage are requested.

User Response:  Notify the system programmer.

System Programmer Response:  Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination:  This is an internal error.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 5, 32, 60, 61.

00E40325

Explanation:  An error occurred during the construction of an index. The error occurred while loading the index entries into the index page set.

This abend reason code is issued by the following CSECT: DSNURBXB

System Action:  The utility job is abended. A SYSABEND dump of batch storage and an SVC dump of the database services storage are requested.

User Response:  Notify the system programmer.

System Programmer Response:  Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Problem Determination: This is an internal error.

Collect the following diagnostic items listed in Appendix B.

**00E40326**

Explanation: An error occurred during the construction of an index. The error occurred during sort.

This abend reason code is issued by the following CSECT: DSNURBXB

System Action: The utility job is abended. A SYSABEND dump of batch storage and an SVC dump of the database services storage are requested.

User Response: Notify the system programmer.

System Programmer Response: Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**00E40333**

Explanation: An error occurred while attempting a forced write of RELOAD phase data buffers.

This abend reason code is issued by the following CSECT: DSNURFIS

System Action: RELOAD phase processing is terminated. An SDUMP of the ssnmDBM1 address space is requested.

System Programmer Response: Determine the failing environment. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**00E40334**

Explanation: LOAD or REORG utility processing was attempting to retrieve COLUMN information from the SYSIBM.SYSFIELDS catalog table when an error was detected.

This abend reason code is issued by the following CSECTs: DSNURFIT, DSNURWIS, DSNUBACI, DSNUBAFI

System Action: Utility processing is abended. An SDUMP is requested unless this abend is accompanied by a DSNT500I message written to the SYSPRINT data set.

User Response: Notify the system programmer.

System Programmer Response: Correct the indicated error, if possible, and resubmit the terminated utility job with the RESTART parameter. If the problem can not be corrected, and if you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**00E40335**

Explanation: An error has been detected while attempting to read a row from the SYSIBM.SYSELDRELS table.

This abend reason code is issued by the following CSECT: DSNUGRLN

System Action: The utility job is abended.

User Response: Notify the system programmer.

System Programmer Response: Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**00E40336**

Explanation: LOAD or REORG utility used the DSNXIFPS protocol to invoke a field procedure for encode or decode and an error code was returned that indicates a DB2 internal error.

This abend reason code is issued by the following CSECTs: DSNURFBR, DSNURWBG

System Action: Utility processing is abended. An SDUMP is requested.

User Response: Notify the system programmer.

System Programmer Response: This is an internal error. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**00E40340**

Explanation: The LOAD or REPAIR utility used the DSNXVCCR protocol to invoke a conversion routine for a date/time data type. An error code was returned that indicates a DB2 internal error.

This abend reason code is issued by the following CSECTs: DSNURWBG, DSNURWUT, DSNUCBRK

System Action: The utility job is abended. An SDUMP of the ssnmDBM1 address space is requested.

User Response: Notify the system programmer.

System Programmer Response: Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**00E40341**

Explanation: A failure occurred during reset processing for a LOAD REPLACE or LOAD PART REPLACE utility.

System Action: The utility job is abended. An SDUMP of the ssnmDBM1 address space is requested.

User Response: Notify the system programmer.

System Programmer Response: Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: This is an internal error.
Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 5, 32, 46, 60, 61.

00E40343
Explanation: The LOAD or REORG utility used the DSNJCKLO protocol to obtain the current log RBA. An error code was returned that indicates a DB2 internal error.
System Action: The utility job is abended. An SDUMP of the ssnmDBM1 address space is requested.
User Response: Notify the system programmer.
System Programmer Response: Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Problem Determination: This is an internal error.
Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 5, 32, 46, 60, 61.

00E40345
Explanation: The subtask performing an MVS sort terminated abnormally.
This abend reason code is issued by the following CSECTs: DSNUREKY, DSNURELD, DSNURBxD
System Action: Any error message generated by sort in conjunction with the abend is directed to the device/data set identified by the UTPRINT DD statement in the utility job step.
User Response: Determine the cause of the error. If the error can be corrected, the utility can be restarted from the beginning of the load phase by using the ‘RESTART(PHASE)’ parameter. If the error prevents the utility from completing, the -TERM command should be issued to remove the stopped utility from the system.
Operator Response: An operator with SYSOPR authority can issue the -TERM utility command to release the resources claimed by the stopped utility (this might not be necessary).
Problem Determination: This error can be caused by abend 00E40005 and error message DSNU044I issued from the subtask. If this is the case, correct the subtask error causing the subtask to abend. In most cases, the error messages from SORT that are sent to the device/data set identified by the UTPRINT DD statement identify the problem. The dump might not be needed. If SORT is unable to open the UTPRINT data set, only the message and abend are provided. In this case, correct the problem associated with the UTPRINT DD statement, and restart the job with the RESTART(PHASE) option.
Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 5, 32, 46, 60, 61.

00E40346
Explanation: The LOAD or REORG subtask creating a COPY data set terminated abnormally.
System Action: Any error message generated by the subtask in conjunction with the abend is directed to the device and data set identified by the SYSPRINT DD statement in the utility job step.
User Response: Determine the cause of the error. If you can correct the error, restart the utility from the beginning of the reload phase by using the ‘RESTART(PHASE)’ parameter. If the error prevents the utility from completing, issue the -TERM command to remove the stopped utility from the system.
Operator Response: An operator with SYSOPR authority can issue the -TERM UTILITY command to release the resources claimed by the stopped utility (this might not be necessary).
Problem Determination: This error can be caused by out of space situations on the data sets identified by the COPYDDN and RECOVERYDDN keywords. If this is the case, correct the data set allocations and restart the job with the RESTART(PHASE) option.
Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 5, 32, 46, 60.

00E40347
Explanation: This utility’s main task is abending because one of its subtasks terminated abnormally. The subtask itself issues an abend before this one is issued.
System Action: Any error message generated by the subtask in conjunction with the abend is directed to the device and data set identified by the SYSPRINT DD statement in the utility job step.
User Response: Determine the cause of the error in the subtask. If you can correct the error, restart the utility from the beginning of the phase by using the ‘RESTART(PHASE)’ parameter. If the error prevents the utility from completing, issue the TERM UTILITY command to remove the stopped utility from the system.
Operator Response: An operator with SYSOPR authority can issue the TERM UTILITY command to release the resources claimed by the stopped utility (this might not be necessary).
Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 5, 32, 46, 60.

00E40350
Explanation: An error has been returned from LOB MANAGER insert.
System Action: Utilities processing is abended.
User Response: Register 2 contains a secondary DB2 reason code that will give more information about the problem. Notify the system programmer.
Problem Determination: This is an internal error.
Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2, 4, 5, 32, 46.

00E40351
Explanation: LOAD RESUME YES for a table space containing a table with CLOB, BLOB or DBCLOB columns cannot be restarted in the RELOAD phase with the ‘RESTART(PHASE)’ parameter.
System Action: Utilities processing is abended.
User Response: The utility can be restarted or terminated:
- To restart the utility, specify the ‘RESTART’ parameter to restart at the last commit point.
- To terminate, use the -TERM command to terminate the utility, then run the CHECK LOB utility to identify any LOBs
Problem Determination: This is an internal error.

Collect the following diagnostic items listed in Appendix B.
*Problem determination* on page 1051 1, 5, 32, 46, 60, 61.

---

00E40405

Explanation: An error has been returned from the open-piece function, DSNBOPPP.

This abend reason code is issued by the following CSECT: DSNUCBRP

System Action: Utilities processing is abended.

User Response: Notify the system programmer.

System Programmer Response: Determine the failing environment. Refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem Determination: This is an internal error.

Collect the following diagnostic items listed in Appendix B.
*Problem determination* on page 1051 1, 5, 32, 46, 60, 61.

---

00E40406

Explanation: An error has been returned from the replace-page function, DSNBREL.

This abend reason code is issued by the following CSECT: DSNUCBRP

System Action: Utilities processing is abended.

User Response: Notify the system programmer.

System Programmer Response: Determine the failing environment. Refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem Determination: This is an internal error.

Collect the following diagnostic items listed in Appendix B.
*Problem determination* on page 1051 1, 5, 32, 46, 60, 61.

---

00E40410

Explanation: The data manager protocol DSNISETR returned an error.

This abend reason code is issued by the following CSECTs: DSNUCDEL, DSNURLAP

System Action: Utilities processing is abended.

System Programmer Response: Determine the failing environment. Refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem Determination: This is an internal error.

---

00E40411

Explanation: An error has been returned from a DSNIDLET protocol during REPAIR DELETE processing.

This abend reason code is issued by the following CSECT: DSNUCDEL

System Action: Utilities processing is abended.

System Programmer Response: Determine the failing environment. Refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem Determination: This is an internal error.
Explanation: An error has been detected by the REPAIR utility. Specifically, the DSNINOTC protocol has returned an error.

This abend reason code is issued by the following CSECTs:
- DSNUCBLP
- DSNUCBRR
- DSNUCDEL

System Action: The utility job step is placed in the stopped state.

Problem Determination: This abend code may be accompanied by a DSNTS500 error message that may indicate a correctable problem. If the DSNTS500 message has not been issued or if the problem cannot be corrected, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 5, 32, 46, 60, 61.

Explanation: An error was detected while trying to determine the highest member ID in the data sharing environment. This is an internal error.

This abend reason code is issued by the following CSECTs:
- DSNUPREC
- DSNUCALA
- DSNUAHRR2

System Action: Utilities processing is abended.

System Programmer Response: Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Explanation: An error was detected while trying to determine the member name for the data sharing member ID. This is an internal error.

This abend reason code is issued by the following CSECTs:
- DSNUPREC
- DSNUPLGR
- DSNUCALA

System Action: Utilities processing is abended.

System Programmer Response: Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Explanation: An error was returned by the reset function, DSNRPRSPS or DSNRPREST.

This abend reason code is issued by the following CSECT: DSNUGTER

System Action: Utilities processing is abended.

User Response: Notify the system programmer.

System Programmer Response: Determine the failing environment. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: This abend might be accompanied by one or more DSN messages to the operator’s console. The DSN messages might indicate a user error that can be corrected. If DSN messages do not accompany this message, the likely cause of the abend is an internal error.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 5, 32, 46, 60, 61.

Explanation: There was a utility abend on the batch side of DB2. This abend can be issued by either the CATMAINT or the REPAIR DBD utility. The utility terminates and all work up to the time of abend is backed out.

This abend reason code is issued by the following CSECTs:
- DSNUECML
- DSNUECMU
- DSNUECM0
- DSNUECM1
- DSNUEXDL
- DSNUEXLO
- DSNUEXUN

System Action: The execution unit driving this function proceeds normally. A user dump is requested.

Operator Response: Notify the system programmer, request the user dump, and print the SYS1.LOGREC, and the BSDS.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: SYOUT might contain the record being processed at the time of abnormal termination. The following general purpose registers (GPRs) contain the indicated diagnostic information:

<table>
<thead>
<tr>
<th>GPR</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Address of the error message</td>
</tr>
<tr>
<td>5</td>
<td>Address of the load table</td>
</tr>
</tbody>
</table>

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 5, 61.

Explanation: There was a utility abend in the DB2 database services address space (ssnmDBM1).

This abend can be issued by either the CATMAINT or the REPAIR DBD utility. The utility terminates and all work up to the time of abend is backed out.

This abend reason code is issued by the following CSECTs:
- DSNUECMI
- DSNUECM2
- DSNUEXDL

System Action: The execution unit driving this function proceeds normally.

Operator Response: Notify the system programmer, request the SVC dump, and print the SYS1.LOGREC, and the BSDS.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The following general purpose registers (GPRs) contain the indicated diagnostic information:

<table>
<thead>
<tr>
<th>GPR</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Address of the error message</td>
</tr>
<tr>
<td>7</td>
<td>Address of CT</td>
</tr>
</tbody>
</table>

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 3, 5.
00E40609

Explanation: A DBD was encountered which is noncontiguous in the EDM pool due to prior operations and the DBD is currently accessed by users. The utility requires the DBD to be contiguous in the EDM pool.

This abend reason code is issued by the following CSECT: DSNUECMI

System Action: The utility that detected this condition returns "RESOURCE NOT AVAILABLE" to its invoker.

User Response: Allow all SQL access to this database to cease; this will allow the DBD to be flushed from the EDM pool. After all users have finished accessing the database, invoke the utility again. A contiguous DBD will be brought into the EDM pool.

User Response: Notify the system programmer.

System Programmer Response: Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: This is an internal error.

Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051 1, 5.

00E40705

Explanation: The data manager protocol DSNIEXTK returned an error.

This abend reason code is issued by the following CSECTs: DSNUKSCT, DSNUKICK, DSNURLXL

System Action: Utility processing abends.

User Response: Notify the system programmer.

System Programmer Response: Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: This is an internal error.

Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051 1, 5.

00E40706

Explanation: The CHECK DATA utility detected an error while processing primary keys matching. The data manager protocol DSNKSET returned an error.

This abend reason code is issued by the following CSECTs: DSNUKIFK, DSNUKNFK

System Action: Utility processing abended.

User Response: Notify the system programmer.

System Programmer Response: Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: This is an internal error.

Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051 1, 5.

00E40707

Explanation: The CHECK DATA utility detected an error while processing primary keys matching. The data manager protocol DSNKNEX returned an error.

This abend reason code is issued by the following CSECT: DSNUKIFK

System Action: Utility processing abended.

User Response: Notify the system programmer.

System Programmer Response: Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: This is an internal error.

Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051 1, 5.
**00E40708**

**Explanation:** The CHECK DATA utility detected an error while positioning records for cascade delete processing. The data manager protocol DSNISETD returned an error.

This abend reason code is issued by the following CSECT: DSNUKRKY

**System Action:** Utility processing abended.

**User Response:** Notify the system programmer.

**System Programmer Response:** Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** This is an internal error.

Collect the following diagnostic items listed in [Appendix B]: "Problem determination" on page 1051: 1, 5.

---

**00E40709**

**Explanation:** An error has been detected by the CHECK DATA utility during positioning of records for cascade delete processing. The data manager protocol DSNINEXD has returned an error.

This abend reason code is issued by the following CSECT: DSNUKRKY

**System Action:** Utilities processing is abended.

**User Response:** Correct the error condition identified by the DSNT500I message, terminate the utility and restart it from the beginning.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If the condition identified cannot be corrected, determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** This is an internal error.

Collect the following diagnostic items listed in [Appendix B]: "Problem determination" on page 1051: 1, 5.

---

**00E4070A**

**Explanation:** The CHECK DATA utility detected an error during insert records processing. The data manager protocol DSNISRT returned an error.

This abend reason code is issued by the following CSECTs: DSNUKRDN DSNUKRKY

**System Action:** Utility processing abended.

**User Response:** Review the definition of the exception tables involved to determine if the following conditions are causing the error:

- The exception table has referential constraints.
- The exception table has unique indexes.
- The exception table "table-name2" is identical with "table-name1" in the FOR EXCEPTION keyword.

If none of these is the cause, notify the system programmer.

**System Programmer Response:** Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** If the errors listed in the User Response section are not the cause, this is an internal error.

Collect the following diagnostic items listed in [Appendix B]: "Problem determination" on page 1051: 1, 5.

---

**00E4070D**

**Explanation:** An error was detected while attempting to update the EPOCH column of SYSIBM.SYSTABLEPART table.

This abend reason code is issued by the following CSECT: DSNUGUEN

**System Action:** Utilities processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

**User Response:** Correct the 'resource unavailable' condition identified by the DSNT500I message. Either restart the utility from the last commit point or terminate the utility and start it again from the beginning. Refer to Table 3 in [Appendix B]: "Problem determination" on page 1051 for an explanation of resource type codes.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

**Problem Determination:** If the condition cannot be corrected, determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in [Appendix B]: "Problem determination" on page 1051: 1, 5, 32, 46, 60, 61.

---

**00E4070F**

**Explanation:** An error was detected during the execution of a restarted utility. A message is issued prior to this abend code to indicate the type of error.

This abend reason code is issued by the following CSECT: DSNUK001

**System Action:** Utility processing is abended.

**User Response:** Check messages issued prior to this abend code to determine the cause of the error. Correct the error, and restart the job.

**Problem Determination:** This abend is forced to allow restart of the utility when work data sets are used and the disposition is (MOD,DELETE,CATLG).

---

**00E40900**

**Explanation:** The DIAGNOSE utility forced an ABEND. The specified instance of the specified utility TRACEID or message, from the DIAGNOSE ABEND utility input statement, was encountered during utility processing while DIAGNOSE mode was on.

This abend reason code is issued by the following CSECT: DSNUGABN

**System Action:** The utility is abended as requested.

**User Response:** Continue with the diagnosis procedure in progress.

If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Problem Determination: The ABEND option of the DIAGNOSE utility was invoked to force an abend on a particular instance of a specified utility TRACEDM or message. The instance of that TRACEDM or message was encountered during utility processing while DIAGNOSE mode was active and an abend was forced to occur at that point.

00E40901
Explanation: The DIAGNOSE utility failed while attempting to set the batch utility address space nownswappable.

This abend reason code is issued by the following CSECT: DSNUDIWTC
System Action: Utility processing is abended.
User Response: Terminate the utility and restart it from the beginning. If the problem persists, wait until fewer applications are running on the system before resubmitting the job.
System Programmer Response: Determine the environment for the SYSEVENT TRANSWAP failure. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Problem Determination: The DIAGNOSE utility attempted to set the batch utility address space nonswappable by issuing a SYSEVENT TRANSWAP operation. The operation failed to set the address space nonswappable.

Collect the following diagnostic items listed in "Problem determination on page 1051" 1, 5, 32, 61.

00E40902
Explanation: A bad parameter has been detected for the DIAGNOSE WAIT function.

This abend reason code is issued by the following CSECT: DSNUDWT
System Action: Utilities processing is abended. An SVC dump is requested.
Operator Response: Notify the system programmer.
System Programmer Response: Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Problem Determination: This is an internal error.
Collect the following diagnostic items listed in "Problem determination on page 1051" 1, 5, 32, 46, 60.

00E40903
Explanation: An error has been detected while creating the service task for the DIAGNOSE WAIT function.

This abend reason code is issued by the following CSECT: DSNUDWT
System Action: Utilities processing is abended. An SVC dump is requested.
Operator Response: Notify the system programmer.
System Programmer Response: Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Problem Determination: This is an internal error.
Collect the following diagnostic items listed in "Problem determination on page 1051" 1, 5, 32, 46, 60.

00E40904
Explanation: An error has been detected during the DIAGNOSE WAIT function.

This abend reason code is issued by the following CSECT: DSNUDIWTC
System Action: Utilities processing is abended. An SVC dump is requested.
Operator Response: Notify the system programmer.
System Programmer Response: Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Problem Determination: This is an internal error.
Collect the following diagnostic items listed in "Problem determination on page 1051" 1, 5, 32, 46, 60.

00E40905
Explanation: An error has been detected while deleting the service task for the DIAGNOSE WAIT function.

This abend reason code is issued by the following CSECT: DSNUDWT
System Action: Utilities processing is abended. An SVC dump is requested.
Operator Response: Notify the system programmer.
System Programmer Response: Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Problem Determination: This is an internal error.
Collect the following diagnostic items listed in "Problem determination on page 1051" 1, 5, 32, 46, 60.

00E40906
Explanation: An error has been detected while issuing a WTOR message.

This abend reason code is issued by the following CSECT: DSNUDWT
System Action: Utilities processing is abended. An SVC dump is requested.
Operator Response: Notify the system programmer.
System Programmer Response: Determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Problem Determination: This is an internal error.
Collect the following diagnostic items listed in "Problem determination on page 1051" 1, 5, 32, 46, 60.

00E40907
Explanation: An error has been detected while attempting to map externals to a specific database descriptor (DBD).

This abend reason code is issued by the following CSECT: DSNUGMAP
System Action: Utilities processing is abended. The abend may be accompanied by message DSNT500I. An SDUMP may be taken.
User Response: Correct the ‘resource unavailable’ condition identified by the DSNT500I message and either restart the utility from the last commit point or terminate the utility and start it again from the beginning. If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that will give more information about the problem.

Operator Response: Notify the system programmer.

System Programmer Response: If the condition identified cannot be corrected, determine the failing environment. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: See message DSNT500I in this manual. Refer to Table 3 in Appendix B, “Problem determination” on page 1051 for an explanation of resource type codes. See the secondary reason code from register 2, also in this manual. Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 5, 32, 46, 60.

00E4D5D2

Explanation: This abend is placed at logic points that will occur only through a programming error.

System Action: Utility processing abends. No SYSABEND dump or SVC dump is requested.

User Response: Any 00E4D5D2 is an APARable situation. The abend module and offset will identify the code location in error.

Problem Determination: Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
X'E5......' Codes

00E50001
Explanation: A latch acquisition request violates latch deadlock prevention protocols. If the request was unconditional, the execution unit owns a latch at a level equal to or greater than the level of the requested latch. If the request was conditional, the execution unit already owns a latch at the requested level. This is a DB2 subsystem error.

This abend reason code is issued by the following CSECT: See Problem Determination.

System Action: The requesting execution unit is abended.

Operator Response: Notify the system programmer of the abend.

System Programmer Response: Collect the necessary diagnostic material. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: This abend is issued by the in-line expansions of the latch acquisition macros DSNVLTHS and DSNVLTHX.

At the time of the abend, diagnostic information has been placed in general registers 2 through 5.

<table>
<thead>
<tr>
<th>Register</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Latch class number (1-32).</td>
</tr>
<tr>
<td>3</td>
<td>Address of the latch.</td>
</tr>
<tr>
<td>4, 5</td>
<td>Latch class name (1 to 8 characters, left-justified).</td>
</tr>
</tbody>
</table>

Registers 2-12 of the invoking module were saved in the save area pointed to by register 13 at the time the error was detected.

It is the responsibility of the requesting resource manager to have functional recovery in place before requesting a latch. It is expected that a record will be written to SYS1.LOGREC and a DB2 SVC dump will be requested. Examine SYS1.LOGREC and, if available, the SVC dump to determine the subcomponent and module requesting the latch.

00E50002
Explanation: A release latch request was issued for a latch not held by the requesting execution unit. This is a DB2 subsystem error.

This abend reason code is issued by the following CSECT: See Problem Determination.

System Action: The requesting execution unit is abended.

System Programmer Response: Collect the necessary diagnostic material. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Operator Response: Notify the system programmer of the abend.

Problem Determination: This abend is issued from within the in-line expansions of the latch release macros DSNVUNLS and DSNVUNLX and from module DSNVXUL0.

At the time of the abend, diagnostic information is placed in general registers 2 through 5.

00E50004
Explanation: An error was found while attempting to resume a waiter after a latch was released. This abend is issued when the next resource options block (ROB) to be resumed is the same as the immediately previous ROB. That is, the ROBCNHA of a ROB points to itself.

This abend reason code is issued by the following CSECT: DSNVXUL0

System Action: The current execution unit is abended.

Operator Response: Notify the system programmer.

System Programmer Response: Collect the necessary diagnostic material. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: A record is written to SYS1.LOGREC, and a DB2 SVC dump is requested.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2, 5.

00E50005
Explanation: A resource options block (ROB) which was to be added to a latch waiter chain was discovered to be on the chain already. The same ROB cannot be on the same latch waiter chain twice. This is probably a DB2 subsystem error.

This abend reason code is issued by the following CSECTs: DSNVSLT0 DSNVUL0 DSNVXLT0

System Action: The requesting execution unit is abended.

Operator Response: Notify the system programmer.
System Programmer Response: Collect the necessary diagnostic materials. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: At the time of the abend, general register three contains the address of the ROB which would have been added to the latch waiter chain.

A record is written to SYS1.LOGREC and a DB2 SVC dump is requested.

Collect the following diagnostic items listed in Appendix B.

00E50006

Explanation: An execution unit which, according to tracking information, is currently suspended on a latch waiter chain issued a request to acquire a latch. A single execution unit cannot do both at the same time. This is probably a DB2 subsystem error.

This abend reason code is issued by the following CSECTs: DSNVSLT0, DSNVXLT0, and any CSECT that issues the DSNVSLTH or DSNVXLTX latch acquisition macros.

System Action: The requesting execution unit is abended.

Operator Response: Notify the system programmer.

System Programmer Response: Collect the necessary diagnostic materials. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: At the time of the abend, general register zero contains the address of the latch upon which the execution unit is supposedly waiting and general register two contains the address of the resource options block (ROB) which was put on the latch waiter chain.

A record is written to SYS1.LOGREC and a DB2 SVC dump is requested.

Collect the following diagnostic items listed in Appendix B.

00E50007

Explanation: An execution unit which, according to tracking information, is currently suspended on a latch waiter chain issued a request to test or to release a latch. A single execution unit cannot do both at the same time. This is probably a DB2 subsystem error.

This abend reason code is issued by the following CSECTs: DSNVLT0, DSNVSUL0, DSNVXUL0, and any CSECT that issues the DSNVUNLS or DSNVUNLX latch release macros.

System Action: The requesting execution unit is abended.

Operator Response: Notify the system programmer.

System Programmer Response: Collect the necessary diagnostic materials. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: At the time of the abend, general register zero contains the address of the latch upon which the execution unit is supposedly waiting and general register two contains the address of the resource options block (ROB) which was put on the latch waiter chain.

A record is written to SYS1.LOGREC and a DB2 SVC dump is requested.

Collect the following diagnostic items listed in Appendix B.

00E50008

Explanation: A latch manager module detected that an execution unit requesting latch manager service pointed to an invalid execution block (EB). This is probably a DB2 subsystem error.

This abend reason code is issued by the following CSECTs: DSNVSDC0

System Action: The requesting execution unit is abended.

Operator Response: Notify the system programmer.

System Programmer Response: Collect the necessary diagnostic materials. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: A record is written to SYS1.LOGREC and a DB2 SVC dump is requested.

Collect the following diagnostic items listed in Appendix B.

00E50009

Explanation: A latch manager module detected an invalid resource options block (ROB) while processing a request for service. This is probably a DB2 subsystem error.

This may be either an abend reason code or a DB2 subsystem termination code.

This reason code is issued by the following CSECTs: DSNVLFRR

System Action: The requesting execution unit is abended.

Operator Response: Notify the system programmer.

System Programmer Response: Collect the necessary diagnostic materials. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: A record is written to SYS1.LOGREC and a DB2 SVC dump is requested.

Collect the following diagnostic items listed in Appendix B.

00E50012

Explanation: A caller in TCB mode requested the SRB redispatch function. SRB redispatch can only be requested by SRB-mode callers. This is probably a DB2 subsystem error.

This abend reason code is issued by the following CSECT: DSNVSDC0

System Action: The requesting task is abended.

Operator Response: Notify the system programmer.

System Programmer Response: Collect the necessary diagnostic material. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Problem Determination: The recovery routine in DSNVSDC0 creates diagnostic material, an entry in SYS1.LOGREC and a DB2 SVC dump is requested. These must be examined to determine the task and resource manager which made the illegal request.

Collect the following diagnostic items listed in Appendix B.

00E50013

Explanation: A DB2 execution unit has been abended. This abend code must ultimately be issued by resource managers when the CANCEL exit is driven as a result of a suspend request.

This abend reason code is issued by the following CSECTs:

DSNVSR DSNVSRB DSNVSDC0

System Action: The cancel agent processing continues.

Operator Response: Notify the system programmer only if the abend results in the termination of the DB2 subsystem.

System Programmer Response: This reason code may be issued as a result of any connected TCB abend, or operator -STOP DB2 MODE(FORCE) command. No further action is required.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA). If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: If DB2 abends, examine the SVC dump to determine the suspended resource manager and the state of the failing subcomponent. For example, the ACEMC (must complete) bit should be off.

Collect the following diagnostic items listed in Appendix B.

00E50014

Explanation: Either the execution block (EB) or the agent services global communication area (VGCA) was invalid. The error was detected when the agent services resume function attempted to resume a TCB in an address space other than the primary of the resume requester. This is a subsystem error.

This abend reason code is issued by the following CSECT: DSNVSR

System Action: The error is percolated (passed) to the recovery routine for the TCB that was to have been resumed.

Operator Response: Notify the system programmer.

System Programmer Response: The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA). If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: An entry is written to SYS1.LOGREC, and a DB2 dump is requested by the FRR DSNVSR. Examine the SVC dump and determine the resource manager module requesting the resume operation. Register 3 contains the SRB address. Register 5 contains the EB address. If the VGCA is invalid, its address is in register 8. The EB in question is that of the target TCB.

Collect the following diagnostic items listed in Appendix B.

00E50015

Explanation: The MVS control block (either RB or STSV - SRB Status Save Area) that was the intended object of a resume request was invalid. The RB or STSV address was obtained from the DB2 EB (execution block) at offset X'1C'. This is a subsystem error.

This abend reason code is issued by the following CSECTs:

DSNVSR DSNVSRB DSNVSDC0

System Action: If the CSECT that abends is DSNVSRB, the error is percolated (passed) to the recovery routine for the TCB that was to have been resumed. If the CSECT that abends is DSNVSR, the error is percolated to the DB2 SRB recovery task DSNVRCT. Ultimately, the subsystem may be terminated abnormally. If the CSECT that abends is DSNVSDC0, the error will be retried one time and, if unsuccessful, the DB2 subsystem is terminated with a 00E50054 reason code.

Operator Response: Notify the system programmer.

System Programmer Response: The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA). If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: A SYS1.LOGREC entry and a DB2 SVC dump are requested by the FRR DSNVSR and by the recovery routine in DSNVSDC0. Register 6 contains the target EB address.

Collect the following diagnostic items listed in Appendix B.

00E5001A

Explanation: A CANCEL THREAD command caused the thread to be terminated. A dump is provided for diagnostic purposes as a result of the CANCEL command DUMP keyword.

System Action: DB2 writes a SYS1.LOGREC record and requests an SVC dump. The execution unit abends.

Operator Response: Notify the system programmer.

System Programmer Response: The command might have been used to terminate a thread that was in a state where no processing was occurring and the thread could not continue.

If you suspect an internal DB2 error, obtain a copy of the SYS1.LOGREC listing and the SVC dump. Determine the failing environment (DB2, IMS, CICS, or TSO).

Problem Determination: Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B.

The module that was suspended while waiting for some action to be taken is the module that issued the abend.
**00E50029**

**Explanation:** The Agent Services function which establishes the DB2 tasking structure abends with this reason code following the detection of a load module which was loaded without the 31-bit addressing capability. The abend is preceded by message DSNV029.

This abend reason code is issued by the following CSECT: DSNVASIM

**System Action:** Subsystem start-up is terminated.

**System Programmer Response:** See message DSNV029i.

---

**00E50030**

**Explanation:** A request was made to initialize an already-initialized DB2 address space. This is a subsystem error.

This abend reason code is issued by the following CSECT: DSNVASIM

**System Action:** The requesting execution unit is abended.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Examine the SVC dump and determine the resource manager module (contents of register 14 in save area pointed to by register 13) that invoked DSNVASIM. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** A record is written to SYS1.LOGREC, and an SVC dump is requested. Register 6 contains the address of the EB. Field EBPASCE contains the ASCE address of the address space to be initialized.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2, 5.

---

**00E50031**

**Explanation:** An agent termination request was issued from a secondary execution unit for an agent created with APLOPT=1. This is an invalid use of the terminate allied agent function.

This abend reason code is issued by the following CSECT: DSNVTRTH

**System Action:** The requesting execution unit is abended.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Determine the resource manager module that invoked DSNVTRTH. Register 14, in the save area pointed to by register 13, contains the return address of the invoking module. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

**Problem Determination:** A record is written to SYS1.LOGREC, and a DB2 SVC dump is requested.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2, 5.

---

**00E50032**

**Explanation:** An agent services manager functional request was issued with an invalid specification of the ACE operand. This is an invalid use of the requested service.

This abend reason code is issued by the following CSECTs: DSNVTRTH DSNVDISC DSNVCONN

**System Action:** The requesting execution unit is abended.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Verify that the ACE control block is a valid allied agent. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA). If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** A record is written to SYS1.LOGREC, and an SVC dump is requested. Register 1 at entry to the module normally contains the ACE address. However, if register 1 at entry to DSNVTRTH is zero, then the address at register 6 is the ACE address to be terminated. That address points to the EBROB which, in turn, points to the ROBACE.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2, 5.

---

**00E50035**

**Explanation:** During the processing of a request to perform system agent allocation, a resource manager returned a nonzero return code from an allocation notification. This is a subsystem error.

This abend reason code is issued by the following CSECT: DSNVIALC

**System Action:** The requesting execution unit is abended.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The error is recorded on SYS1.LOGREC, and an SVC dump is requested. Register 7 contains the nonzero allocation return code.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2, 5.

---

**00E50036**

**Explanation:** A request was made to perform system agent allocation for an agent that had already been allocated.

This abend reason code is issued by the following CSECT: DSNVIALC

**System Action:** The requesting execution unit is abended.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2, 5.
**Problem Determination:** The error is recorded on SYS1.LOGREC, and an SVC dump is requested. The fullword address at register 6, which points to EBR0B, should have been zero. That address points to the ROBACE which, in turn, points to the ACERAL.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 5.

---

**00E50040**

**Explanation:** DB2 subsystem termination was invoked following an unrecoverable error while processing a terminate allied agent request at the thread, sign on, or identify level. The FRR (DSNVTFRR) covering module DSNVTRTH was unable to recover. This is a subsystem termination reason code.

This reason code is issued by the following CSECT: DSNVTDFRR

**System Action:** The DB2 subsystem is terminated.

**Operator Response:** Notify the system programmer, and restart DB2.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** Scan the MVS system log and the contents of SYS1.LOGREC for DB2 abends occurring immediately before the system termination message DSNV085E. Follow the failure analysis procedures for the specific abend(s). Refer to Appendix A, "CICS Transaction Abend/Dump Code" on page 1049 for information about X'04F' and X'04E' abend completion codes.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 5.

---

**00E50041**

**Explanation:** DB2 subsystem termination was invoked following an unrecoverable error while processing a terminate allied agent structure request. The FRR (DSNVTFRR) covering module DSNVFACE was unable to recover. This is a subsystem termination reason code.

This abend reason code is issued by the following CSECT: DSNVTDFRR

**System Action:** The DB2 subsystem is terminated.

**Operator Response:** Notify the system programmer, and restart DB2.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** Scan the MVS system log and the contents of SYS1.LOGREC for DB2 abends occurring immediately before the system termination message DSNV085E. Follow the failure analysis procedures for the specific abend(s). Refer to Appendix A, "CICS Transaction Abend/Dump Code" on page 1049 for information about X'04F' and X'04E' abend completion codes.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 5.

---

**00E50042**

**Explanation:** An execution unit which, according to tracking information, is currently suspended on a latch waiter chain is in the agent termination process. This may indicate that a latch manager request is still incomplete or has not been serviced properly. This is probably a DB2 subsystem error.

This abend reason code is issued by the following CSECTs: DSNVFACE, DSNVTDFR

**System Action:** The current execution unit is abended.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** At the time of the abend, general register zero contains the address of the latch upon which the execution unit is supposedly waiting and general register two contains the address of the resource options block (ROB) which was put on the latch waiter chain.

A record is written to SYS1.LOGREC and a DB2 SVC dump is requested.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 5.

---

**00E50044**

**Explanation:** A terminate agent request was issued for an agent with an active unit of recovery (URE). This is an invalid use of the terminate allied agent service and is a subsystem error.

This abend reason code is issued by the following CSECT: DSNVTRTH

**System Action:** The requesting execution unit is abended.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

**Problem Determination:** The error is recorded on SYS1.LOGREC, and an SVC dump is requested. Register 1 at entry to the module contains the ACE address of the agent to be terminated. The ACEURE field should have been zero.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 5.

---

**00E50045**

**Explanation:** DB2 subsystem termination was invoked following an unrecoverable error while processing a create allied agent manager request at the thread, sign on, or identify level. The FRR (DSNVCFR) covering module DSNVCRTH was unable to recover. This is a subsystem termination reason code.

This reason code is issued by the following CSECT: DSNVCFR

**System Action:** The DB2 subsystem is terminated.

**Operator Response:** Notify the system programmer, and restart DB2.
System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Scan the MVS system log and the contents of SYS1.LOGREC for DB2 abends occurring immediately before the system termination message DSNV086E. Follow the failure analysis procedures for the specific abend(s). Refer to Appendix A, "CICS Transaction Abend/Dump Code" on page 1049 for information about X’04F’ and X’04E’ abend completion codes.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 5.

00E50046

Explanation: DB2 subsystem termination was invoked following an unrecoverable error while processing a create agent request. The FRR (DSNVCFRR) covering module DSNVGACE was unable to recover. This is a subsystem termination reason code.

This reason code is issued by the following CSECT: DSNVCFRR

System Action: The DB2 subsystem is terminated.

Operator Response: Notify the system programmer, and restart DB2.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Scan the MVS system log and the contents of SYS1.LOGREC for DB2 abends occurring immediately before the system termination message DSNV086E. Follow the failure analysis procedures for the specific abend(s). Refer to Appendix A, "CICS Transaction Abend/Dump Code" on page 1049 for information about X’04F’ and X’04E’ abend completion codes.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 5.

00E50047

Explanation: DB2 subsystem termination was invoked following an unrecoverable error while processing a Format EB RMRQ request. The FRR (DSNVCFRR) covering module DSNVFEB was unable to recover. This is a subsystem termination reason code.

This reason code is issued by the following CSECT: DSNVCFRR

System Action: The DB2 subsystem is terminated.

Operator Response: Notify the system programmer, and restart DB2.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Scan the MVS system log and the contents of SYS1.LOGREC for DB2 abends occurring immediately before the system termination message DSNV086E. Follow the failure analysis procedures for the specific abend(s). Refer to Appendix A, "CICS Transaction Abend/Dump Code" on page 1049 for information about X’04F’ and X’04E’ abend completion codes.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 5.

00E50050

Explanation: The MVS cross-memory lock (CML) of the system services address space was held by the invoking resource manager execution unit during invocation of the cancel, suspend, resume, or SRB redispacth functions. This violates the entry protocols for these functions.

This abend reason code is issued by the following CSECTs: DSNVSR, DSNVSDC0

System Action: The requesting execution unit is abended.

Because resource manager serialization cannot be maintained without the use of this lock, normal recovery is not possible for this abend. The recovery routine terminates the DB2 sub-system through invocation of the agent services subsystem termination protocol.

An '00E50054' recovery reason code is placed in the SDWACOMU field of the SDWA, indicating that synchronization services was responsible for DB2 subsystem termination.

Operator Response: Notify the system programmer, and restart DB2.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Internal protocols specify that no MVS locks may be held at DSNVSR or DSNVSDC0 invocation. Determine the invoking resource manager, the function requested, and the current owner (ASCB) of the CML lock at the time of the error. Diagnostic information for this error may be obtained through the SYS1.LOGREC and DB2 SVC dump materials provided.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 2, 5.

00E50051

Explanation: The resource manager requesting the resume function specified the TCTL=YES option while executing in TCB mode. This violates the entry protocols for this function. This is a subsystem error.

This abend reason code is issued by the following CSECT: DSNVSR

System Action: Mainline processing is abended with an '04E' abend code and this reason code.

Because this error is an internal resource manager protocol violation, normal recovery is not possible for this abend. The recovery routine terminates the DB2 sub-system through invocation of the agent services subsystem termination protocol.

An '00E50054' recovery reason code is placed in the SDWACOMU field of the SDWA indicating that synchronization services was responsible for DB2 subsystem termination.

Operator Response: Notify the system programmer, and restart DB2.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Internal protocol documentation specifies that the TCTL=YES option is valid only for resource managers executing in SRB mode at time of invocation.
Determine the invoking resource manager at time of error. Diagnostic information for this error may be obtained through the SYS1.LOGREC and DB2 SVC dump materials provided.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2, 5.

---

**00E50052**

**Explanation:** The MVS cross-memory lock (CML) of the system services address space could not be released during termination processing of the cancel, suspend, resume, or SRB redispach functions. This abend reason code is issued by the following CSECTs: DSNVSR, DSNVSDC0

**System Action:** Mainline processing is abended with an '04E' abend code and this reason code.

Because resource manager serialization can no longer be maintained without the use of this lock, normal recovery is not possible for this abend. The recovery routine terminates the DB2 subsystem through invocation of the agent services subsystem termination function.

An '00E50054' recovery reason code is placed in the SDWACOMU field of the SDWA indicating that synchronization services was responsible for DB2 subsystem termination.

**Operator Response:** Notify the system programmer, and restart DB2.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** For this abend to occur, the CML lock must have been successfully obtained at some point during mainline processing. Determine the invoking resource manager, the function requested, and the current owner (ASCB) of the CML lock at the time of the error. Diagnostic information for this error may be obtained through the SYS1.LOGREC and DB2 SVC dump materials provided.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2, 5, 7.

---

**00E50054**

**Explanation:** The DB2 subsystem is abended by the synchronization services recovery routine when an unrecoverable error is encountered during recovery processing for the suspend, cancel, resume, or SRB redispach functions. This is a subsystem termination reason code.

This reason code is issued by the following CSECTs: DSNVSR, DSNVSDC0

**System Action:** The DB2 subsystem is terminated. This reason code is associated with an '04F' abend code indicating that synchronization services was responsible for termination.

**Operator Response:** Notify the system programmer, and restart DB2.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** Scan the MVS system log and the contents of SYS1.LOGREC for DB2 abends occurring immediately before the system termination message DSNV086E. Follow the failure analysis procedures for the specific abend(s).

Refer to Appendix A, "CICS Transaction Abend/Dump Code" on page 1049 for information about X'04E' abend completion codes.

One of the following conditions was encountered during recovery processing for the requested function:

- Unable to complete resume processing for an SRB mode execution unit that was suspended at time of error.
- Errors were encountered during primary recovery processing causing entry to the secondary recovery routine.
- Recovery initiated retry to mainline Suspend/Resume code caused retry recursion entry into the functional recovery routine.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 5.

---

**00E50055**

**Explanation:** The synchronization services functional recovery routine was unable to successfully complete resume processing for a suspended TCB mode execution unit. The resume processing was requested by the cancel or resume functions. This reason code is placed in the SDWACOMU field of an SDWA.

This reason code is issued by the following CSECT: DSNVSR

**System Action:** Because the suspended TCB mode execution unit must not be permitted to remain in a suspended state, the recovery routine invokes the MVS CALLRTM (TYPE=ABTERM) service to abend the execution unit with an '04F' completion code. Depending upon which execution unit was terminated, the DB2 subsystem may be abended.

**Operator Response:** Notify the system programmer, and restart DB2 if necessary.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** Scan the MVS system log and the contents of SYS1.LOGREC for DB2 abends occurring immediately before the abend of the execution unit. Follow the failure analysis procedures for the specific abend(s). Refer to Appendix A, "CICS Transaction Abend/Dump Code" on page 1049 for information about X'04F' abend completion codes.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2, 5, 7.

---

**00E50059**

**Explanation:** When preparing to resume an SRB, the target EB (execution block) was validated by checking the EB identifier code in the first halfword of the control block. The identifier code was in error.

This abend reason code is issued by the following CSECTs: DSNVSR, DSNVSDC0

**System Action:** If the CSECT detecting the error is
DSNVSR, the error is percolated (passed) to the DB2 SRB recovery task DSVNRCT. Ultimately, DB2 is terminated abnormally.

If the CSECT detecting the error is DSNVSC0, the code detecting the error will be retried once. If validation fails, the DB2 subsystem is terminated abnormally with a 00E50054 reason code.

**Operator Response:** Notify the system programmer, and restart DB2.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of the *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

**Problem Determination:** A LOGREC entry and a DB2 dump are requested by the FRD DSNVSR and by the recovery routine in DSNVSC0. Register 6 contains the address of the invalid EB.

Collect the following diagnostic items listed in Appendix B, Problem determination on page 1051. 1, 2, 5.

---

**00E50062**

**Explanation:** An application request (RARQ) was issued to a resource access list (RAL). At the time of the request, the RAL had the RAL suppress (RALSUPPR) flag on, and the function vector list entry (FVLE) that was accessed (through FRBFVLE) did not have FVLEBIT0 on. This is not allowed. That is, the FVLE function is not allowed during RAL suppress.

This error may indicate that an IMS/VS or CICS caller had completed Commit Phase 1 and that the next request was not Commit Phase 2, Abort, or Terminate with the Commit or Abort option. This abend is the result of an internal system problem, possibly the DB2 attachment facility or the requesting IMS/VS or CICS subsystem.

This abend reason code is issued by the following macro: DSNARARQ

**System Action:** The allied task requesting the RARQ is abended.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of the *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** The recovery routines of the module invoking the DSNARARQ macro should have requested SYST1.LOGREC recording and either an SVC or application dump (or both.) The FRB contains the FRBRALE and FRBFVLE entries. It also contains the pointers to the RAL and to the execution block address (FRBEB). Register 3 contains the address of the RAL from FRBRAL. Register 4 contains the address of the RALE as located by the FRBRAL pointer (and as indexed by FRBRALE). Register 6 contains the address of the EB from FRBEB.

Collect the following diagnostic items listed in Appendix B, Problem determination on page 1051. 1, 2, 5, 22, 23, 24, 25, 26.

---

**00E50063**

**Explanation:** A resource access request (RARQ) was issued to a function vector list entry (FVLE) that is valid but unauthorized for this allied user at this time. This abend occurs if a request is issued out of sequence. For example, two consecutive CREATE THREAD requests would give this result. This abend also occurs if a request is issued that is never authorized for the caller. For example, it occurs if a BATCH protocol user issues a PREPARE request. A program call (PC) is issued to module DSN3ABND, which issues the X’04E’1 abend with this reason code.

This abend reason code is issued by the following CSECT: DSN3ABND

**System Action:** The task issuing the RARQ is abended. However, DB2 recovery may translate this abend to a return code 256 with this reason code.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of the *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** This is a user error. The issuer of the RARQ was not authorized to use the requested function at this time. The following diagnostic information is available:

- An entry in the DB2 trace table is made for entry to module DSN3ABND. The items traced are the RALE and the FVLE of the intended DSNARARQ request. To determine the sequence of DSNARARQ requests, examine the previous trace table entries for the same execution block (EB).
- An application dump is requested with DB2-supplied control blocks. This includes the FRB associated with the intended DSNARARQ request. Fields FRBRALE and FRBFVLE contain the indexes for the intended request.

Collect the following diagnostic items listed in Appendix B, Problem determination on page 1051. 1, 2, 4, 5.

---

**00E50065**

**Explanation:** RMRQ linkage was requested, specifying a function code that is undefined in the resource manager function table (RMFT) of the designated resource manager.

This abend reason code is issued by the following CSECT: DSNVRMEL

**System Action:** The execution unit under which RMRQ was requested is abended.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of the *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** The recovery routine of the abended resource manager module requested SYST1.LOGREC recording and a DB2 SVC dump. Register 14 points to the resource manager module that requested linkage to the undefined function.

Collect the following diagnostic items listed in Appendix B, Problem determination on page 1051. 1, 2, 5.
00E50069

**Explanation:** This abend code is issued during recovery processing for the suspend function when executing in SRB mode under the recovery routine established by the MVS SRBSTAT(SAVE) service. Because the recovery routine established by this service is the only routine in the FRR stack at the time of error, normal RTM percolation to the invoking resource manager recovery routine is not possible.

After recovery processing for the initial mainline error has successfully completed, the RTM environment is exited through retry to a routine that restores the original FRR stack. This routine then issues an '04E' abend with this reason code. This causes entry into the original recovery routine established during suspend initialization.

This abend reason code is issued by the following CSECTs:
- DSNVSR, DSNVSDC0

**System Action:** After this abend is intercepted by the original suspend recovery routine, a SYS1.LOGREC entry and DB2 SVC dump are requested to document the original error. The original recovery reason code is placed in the SDWACOMU field of the SDWA indicating the actions performed during recovery processing of the initial error. Control is then returned to the invoking resource manager's recovery routine through RTM percolation.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** Because this abend is used only to permit the transfer of the initial recovery reason code to the invoking resource manager's recovery routine, no further recovery actions are required for this abend. Diagnostic information for the initial error encountered during mainline processing may be obtained through the SYS1.LOGREC and SVC dump materials provided.

Collect the following diagnostic items listed in Appendix B "Problem determination" on page 1051: 1, 2, 5.

00E50070

**Explanation:** This abend reason code is issued in response to a delete service task request specifying purge. Additionally, any service task not deleted by the owning resource manager at subsystem shutdown is abended with this reason code.

This abend reason code is issued by the following CSECTs:
- DSNVEUS3, DSNVST0, DSNVEOT1

**System Action:** This abend usually occurs through MVS CALLRTM and, in certain cases, is issued by the service task dispatcher executing under the TCB being abended. The service task is abended.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA). If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** At the time of the abend, 6 points to the execution block (EB) of the execution unit that was active when the abend occurred. The EBSQH field in turn contains a pointer to the service queue header associated with the abending service task.

Collect the following diagnostic items listed in Appendix B "Problem determination" on page 1051: 1, 2, 5.

00E50072

**Explanation:** This abend reason code is issued following an unanticipated cancel return from DSNVSR for an execution unit not expected to be canceled. This code is also a subsystem termination reason code if the abend was issued by module DSNVCST0.

This abend reason code is issued by the following CSECTs:
- DSNVEUS3, DSNVEUS4, DSNVST0, DSNVEOT1

**System Action:** The DB2 subsystem is abended.

**Operator Response:** Notify the system programmer, and restart DB2.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

**Problem Determination:** At the time of the abend, register 6 points to the execution block (EB) associated with the abending execution unit.

Collect the following diagnostic items listed in Appendix B "Problem determination" on page 1051: 1, 2, 5.
00E50073

Explanation: Execution unit switch processing detected an invalid execution block (EB) or an invalid resource options block (ROB). This is probably a DB2 subsystem error.

This abend reason code is issued by the following CSECTs:

DSNVEUS2  DSNVEUS3  DSNVTEB

System Action: The current execution unit is abended.

Operator Response: Notify the system programmer.

System Programmer Response: Collect the diagnostic materials. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: At the time of the abend, general register zero contains the address which should have pointed to a valid control block but did not.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051. 1, 2, 5.

00E50074

Explanation: This abend reason code is issued in response to a nonzero return code from AT TACH during an attempt to create a service task.

This abend reason code is issued by the following CSECT: DSNVEUS4

System Action: The ATTACH is retried. If a failure occurs again, DB2 is terminated.

Operator Response: Notify the system programmer, and restart DB2 if necessary.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Register 2, in the SDWA, contains the return code from the ATTACH request.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051. 1, 2, 5.

00E50075

Explanation: On an execution unit switch request, an invalid service queue header (SQH) and/or service task identifier (STID) was specified. Alternately, the specified or implicit address space may be invalid. This is an internal DB2 protocol error.

This abend reason code is issued by the following CSECT: DSNVEUS1

System Action: The requester is abended.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Using the SYS1.LOGREC entry and the associated SVC dump, determine the resource manager module that requested the execution unit switch. A resource manager should not request deletion of a service task and then attempt to execute under the same task.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051. 1, 2, 5.

00E50076

Explanation: A request was made for an execution unit switch to a service task currently undergoing delete processing. This is an internal DB2 protocol error.

This abend reason code is issued by the following CSECT: DSNVEUS1

System Action: The requester is abended.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Using the SYS1.LOGREC entry and the associated SVC dump, determine the resource manager module that requested the execution unit switch service. Otherwise, the error was found during a delete service task request.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051. 1, 2, 5.

00E50077

Explanation: A deadlock condition was encountered. A request was made to either delete or synchronously execute a service task already participating in a chain of service tasks leading to the current request. This is an internal subsystem protocol error.

This abend reason code is issued by the following CSECTs: DSNVEUS1, DSNVSTD0

System Action: The requesting execution unit is abended.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Using the SYS1.LOGREC entry and the associated SVC dump, determine the resource manager module that requested the function. If the recording FRR is EUS1FRRE, then the deadlock was detected by the execution unit switch service. Otherwise, the error was found during a delete service task request.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051. 1, 2, 5.

00E50078

Explanation: A request was received to create a service task, but the service task controller is terminating. This code is also a subsystem termination reason code if the abend was issued by module DSNVCST0.

This abend reason code is issued by the following CSECT: DSNVCST0

System Action: The requesting execution unit is terminated. The entire subsystem may also be terminated.

Operator Response: Notify the system programmer, and restart DB2.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Using the SYS1.LOGREC entry and associated SVC dump, determine the resource manager
requesting the creation of a service task. DB2 was probably already terminating when this error was encountered. New service tasks cannot be created during subsystem termination.

Collect the following diagnostic items listed in [Appendix B]“Problem determination” on page 1051 1, 2, 5.

**00E50079**

**Explanation:** An invalid address space (ASCE) was specified as the target of an execution unit switch request. This can occur if the target is an allied address space or if the address space was concurrently undergoing termination.

This abend code may also be issued when a passed agent services control block is determined to be invalid.

This abend reason code is issued by the following CSECTs:

- **DSNVEUS1**
- **DSNVSJ**
- **DSNVSDC0**

**System Action:** The requesting execution unit is abended.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of [DB2 Diagnosis Guide and Reference](DB2) for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

**Problem Determination:** Using the SYS1.LOGREC entry and the associated SVC dump, determine the resource manager module that requested the execution unit switch, suspend, resume, cancel, or SRB dispatch function. Using register 6 as a pointer to the execution block (EB), verify that the agent services control blocks — execution block (EB) and resource options block (ROB) — are valid.

Collect the following diagnostic items listed in [Appendix B]“Problem determination” on page 1051 1, 2, 5.

**00E50080**

**Explanation:** An execution unit (SRB or TCB) processor determined that the current MVS Functional Recovery Routine (FRR) stack contained one or more entries for FRR's which should not exist. This check is made at the conclusion of a resource manager function executing under the SRB or TCB.

This error reason code is issued by the following CSECTs:

- **DSNVEUS2**
- **DSNVEUS3**

**System Action:** An SVC dump is requested specifying an abend code of X'04E1' and this reason code. The extraneous ESTAE entries are deleted. Execution continues. The application is not notified.

**Operator Response:** Notify the system programmer of the SVC dump.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of [DB2 Diagnosis Guide and Reference](DB2) for information on identifying and reporting the problem.

**Problem Determination:** MVS console is logged and the SVC dump is taken. No record is written to SYS1.LOGREC.

One or more resource manager functions created an ESTAE exit which was not deleted. Locate the TCB requesting the dump (It will be a DB2 service task in the home address space at the time the dump was requested.) Field TCBSTABB points to a chain of STAE Control Blocks (SCB) for active exits. The only valid SCBs are for the ESTAE exit established (with a token) by DSNVEUS3 and an ESTAI exit established when the task was created. SCBs are located in LSQA. The SCB format is provided as a data area in the appropriate MVS debugging guides.

Collect the following diagnostic items listed in [Appendix B]“Problem determination” on page 1051 1, 2, 5.

**00E50094**

**Explanation:** The macro service to get a resource options block (ROB) determined that a ROB taken from the ROB cache was not formatted properly. This check can occur if the queue which controls the ROB cache was overlaid, if the ROB itself was overlaid, or if there is a programming error in DB2.

This abend reason code is issued by the following CSECTs: Any CSECT which invokes the get ROB service may use this abend reason code.

**System Action:** The requesting execution unit is terminated.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of [DB2 Diagnosis Guide and Reference](DB2) for information on identifying and reporting the problem.

**Problem Determination:** Register zero, which should appear in the SYS1.LOGREC entry for this abend, contains the address which should have pointed to a ROB but apparently did not.

Use the SYS1.LOGREC entry and the associated dump to examine the area which should have been a ROB. It may also be helpful to examine the chain of ROBs in the cache. This chain is anchored in the DB2 DSNVDVGC control block.

Collect the following diagnostic items listed in [Appendix B]“Problem determination” on page 1051 1, 2, 5.
00E50095

Explanation: The macro service to release a resource options block (ROB) determined that a ROB passed to it for release was not formatted properly and did not, in fact, appear to be a ROB at all. This can occur as a result of a storage overlay or if there is a programming error in DB2.

This abend reason code is issued by the following CSECTs: Any CSECT which invokes the release ROB service may use this abend reason code.

System Action: The requesting execution unit is terminated.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Register zero, which should appear in the SYS1.LOGREC entry for this abend, contains the address which should have pointed to a ROB but apparently did not.

Use the SYS1.LOGREC entry and the associated dump to examine the area which should have been a ROB.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

00E50096

Explanation: A request was made to suspend an execution unit but the resource options block (ROB) which is required for this request is invalid. This is probably a DB2 subsystem error.

This abend reason code is issued by the following CSECTs: Any CSECT that requests suspension is subject to this abend since it is issued by the in-line expansion of the macro used to make the request.

System Action: The requesting execution unit is abended.

Operator Response: Notify the system programmer.

System Programmer Response: Collect the necessary diagnostic materials. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: At the time of the abend, general register zero contains the return code from IEAMSCHD.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

00E50097

Explanation: A request was made to resume an execution unit but the resource options block (ROB) which is required for this request is invalid. This is probably a DB2 subsystem error.

This abend reason code is issued by the following CSECTs: Any CSECT that requests resume is subject to this abend since it is issued by the in-line expansion of the macro used to make the request.

System Action: The requesting execution unit is terminated.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: At the time of the abend, general register zero contains the address which should have pointed to a valid ROB but did not.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

00E50098

Explanation: A request was made to resume an execution unit but a non-zero return code was received from the IEAMSCHD service attempting to schedule a client or enclave SRB.

System Action: The requesting execution unit is abended.

Operator Response: Notify the system programmer and rerun the application.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: At the time of the abend, general register zero contains the return code from IEAMSCHD.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

This abend reason code is issued by the following CSECTs: DSNVSR DSNVEUS1

00E50100

Explanation: The ASCE could not be found during recover stack processing. This is an internal subsystem error.

This abend reason code is issued by the following macro: DSNVRSTK

System Action: The requesting recovery routine is abended.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Using register 6 as the address of the execution block (EB), check that field EBPASCE contains a valid ASCE address. Also determine the recovery module invoking the macro from the information provided by the SYS1.LOGREC entry and the associated SVC dump.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

00E50101

Explanation: The agent cancel function was unable to establish an ESTAE while preparing to cancel all active allied agents during processing of the -STOP DB2 MODE(FORCE) command.

This abend reason code is issued by the following CSECT: DSNVAGCL

System Action: The agent cancel function was unable to establish an ESTAE while preparing to cancel all active allied agents during processing of the -STOP DB2 MODE(FORCE) command.

System Programmer Response: The inability to establish an ESTAE is normally due to insufficient free space in the local system queue area (LSQA) for an ESTAE control block (SCB).
If necessary, increase the size of the system services address space.

**Problem Determination:** Review the associated SVC dump for usage and free areas in the LSQA subpools belonging to the system services address space.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 2, 5.

---

**00E50102**

**Explanation:** An unrecoverable error occurred while canceling all active agents during processing of the -STOP DB2 MODE(FORCE) command. This is a subsystem termination reason code.

This abend reason code is issued by the following CSECT: DSNVAGCL

**System Action:** The subsystem is abended.

**Operator Response:** Notify the system programmer, and restart DB2.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** Review the SYS1.LOGREC entries for failures immediately preceding subsystem termination. Refer to Appendix A, "CICS Transaction Abend/Dump Code" on page 1049 for information about X'04F5' and X'04E5' abend completion codes.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 5.

---

**00E50105**

**Explanation:** This is an internal error.

This abend reason code is issued by the following CSECT: DSNVAI

**System Action:** The caller's task is abended.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 5.

---

**00E50106**

**Explanation:** This is an internal error.

This abend reason code is issued by the following CSECT: DSNVAI

**System Action:** The caller's task is abended.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 5.

---

**00E50107**

**Explanation:** This is an internal error.

This abend reason code is issued by the following CSECT: DSNVAI

**System Action:** The caller's task is abended.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 5.

---

**00E50500**

**Explanation:** An MVS LOCAL or CML lock could not be obtained during DB2 subsystem abnormal termination processing.

This abend reason code is issued by the following CSECT: DSNVATRM

**System Action:** The execution unit is abended. The error is recorded on SYS1.LOGREC, and abnormal DB2 subsystem termination is completed under a different execution unit if possible.

**Operator Response:** Notify the system programmer, and restart DB2.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** A SYS1.LOGREC entry is requested. Reason code '00E50504' is placed in the SDWA variable recording area (VRA). The VRA data contains information about the status of subsystem termination at the time of error.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 5.

---

**00E50501**

**Explanation:** An MVS local or CML lock could not be released during DB2 subsystem abnormal termination processing.

This abend reason code is issued by the following CSECT: DSNVATRM

**System Action:** The execution unit is abended. The error is recorded on SYS1.LOGREC. DB2 subsystem termination is completed under a different execution unit if possible.

**Operator Response:** Notify the system programmer, and restart DB2.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** A SYS1.LOGREC entry is requested. Reason code '00E50504' is placed in the SDWA variable recording area (VRA). The VRA data contains information about the status of subsystem termination at the time of error.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 5.
00E50502

**Explanation:** An MVS LOCAL lock could not be obtained during DB2 subsystem abnormal termination processing.

This abend reason code is issued by the following CSECT: DSNVATR4

**System Action:** The execution unit is abended. The error is recorded on SYS1.LOGREC, and abnormal DB2 subsystem termination is completed under a different execution unit if possible.

**Operator Response:** Notify the system programmer, and restart DB2.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** A SYS1.LOGREC entry is requested. Reason code '00E50502' is placed in the SDWA variable recording area (VRA). The VRA data contains information about the status of the subsystem termination at the time of error.

Collect the following diagnostic items listed in Appendix B. "Problem determination on page 1051" 1, 5.

---

00E50503

**Explanation:** An MVS LOCAL lock could not be released during DB2 subsystem abnormal processing.

This abend reason code is issued by the following CSECT: DSNVATR4

**System Action:** The execution unit is abended. The error is recorded on SYS1.LOGREC, and abnormal DB2 subsystem termination is completed under a different execution unit if possible.

**Operator Response:** Notify the system programmer, and restart DB2.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** A SYS1.LOGREC entry is requested. Reason code '00E50503' is placed in the SDWA variable recording area (VRA). The VRA data contains information about the status of the subsystem termination at the time of error.

Collect the following diagnostic items listed in Appendix B. "Problem determination on page 1051" 1, 5.

---

00E50504

**Explanation:** This reason code is used to define the format of the information recorded in the SDWA variable recording area (VRA) by the subsystem termination processor. The code identifies additional information provided in the VRA for abends encountered in module DSNVATRM.

This abend reason code is issued by the following CSECT: DSNVATR4

**System Action:** Recording of the error encountered during subsystem termination continues.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** For information about finding the SDWA refer to Section 3 of *DB2 Diagnosis Guide and Reference*.

---

00E50505

**Explanation:** This reason code is used to define the format of the information recorded in the SDWA variable recording area (VRA). The code identifies additional information provided in the VRA for abends encountered in module DSNVATR4.

This abend reason code is issued by the following CSECT: DSNVATR4

**System Action:** Recording of the error encountered during subsystem termination continues.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

---

00E50701

**Explanation:** A failure occurred during Commit Phase 1. This abend is used to effect abort, deallocation, and end-UR processing.

This abend reason code is issued by the following CSECTs: DSNVEUS2, DSNVEUS3

**System Action:** The DB2 subsystem is abended.

**Operator Response:** Notify the system programmer, and restart DB2.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** Standard DB2 diagnostic information may be obtained through SYS1.LOGREC and SVC dump materials generated at the time of the abend. Register 6 contains the address of the active EB when the commit failed. The DB2 global trace table contains an entry for the commit-UR function exit. The entry contains return and reason codes.

Collect the following diagnostic items listed in Appendix B. "Problem determination on page 1051" 1, 2, 5.

---

00E50702

**Explanation:** An error occurred while processing in SRB mode which could not be recovered.

This termination reason code is issued by the following CSECT: DSNVEUS2

**System Action:** The DB2 subsystem is abended with this reason code.

**Operator Response:** Notify the system programmer and restart DB2.

**System Programmer Response:** Scan the SYS1.LOGREC entries looking for one or more DB2 abends immediately prior to the subsystem termination. If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** A DB2 dump of the original failure was requested by the recovery routine for DSNVEUS2 and a record written to SYS1.LOGREC. Refer to Appendix A, "CICS"
Transaction Abend/Dump Code on page 1049 for information about X'04F' and X'04E' abend completion codes.

**00E50703**

**Explanation:** This subsystem termination reason code is used following an error while attempting to resume a suspended execution unit. The successful completion of resume processing was indoubt. This reason code is issued by the following CSECTs:

- DSNVCST0
- DSNVDST0
- DSNVEUS1
- DSNVEUS3

**System Action:** The DB2 subsystem is abended.

**Operator Response:** Notify the system programmer, and restart DB2.

**System Programmer Response:** Scan the SYS1.LOGREC entries for one or more DB2 abends occurring immediately prior to the subsystem termination. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** DB2 diagnostic information may be obtained through SYS1.LOGREC and SVC dump materials generated at the time of the original error. Refer to Appendix A, "CICS Transaction Abend/Dump Code" on page 1049 for information about X'04F' and X'04E' abend completion codes.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 5.

**00E50704**

**Explanation:** An error occurred in the DB2 Service Task Controller which could not be recovered.

This termination reason code is issued by the following CSECT: DSNVEUS4

**System Action:** The subsystem is terminated with this reason code. Additionally, if no SDWA was provided to the recovery routine, a subsystem termination dump is requested.

**Operator Response:** Notify the system programmer and restart DB2.

**System Programmer Response:** Scan the SYS1.LOGREC entries looking for one or more DB2 abends immediately prior to the subsystem termination. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** If an SDWA was available, a DB2 dump of the original failure was requested and should be analyzed to determine the nature of the original error. If no SDWA was available, the standard MVS SVC dump taken by subsystem termination must be analyzed. The Service Task Controller is the first descendent TCB of the job step TCB in the failing home address space. Refer to Appendix A, "CICS Transaction Abend/Dump Code" on page 1049 for information about X'04F' and X'04E' abend completion codes.

**00E50705**

**Explanation:** A subsystem termination was requested for one of the following reasons:

1. An agent was flagged as executing in 'must complete' mode.
2. An execution unit holds a latch.
3. An agent is marked as being on a latch waiter queue, when none of these conditions should be true. Additionally, the subsystem termination may have been preceded by an abend with this reason code.

This termination reason code is issued by the following CSECTs:

- DSNVEOT1
- DSNVEUS2
- DSNVEUS3

**System Action:** The DB2 subsystem is abended.

**Operator Response:** Notify the system programmer and restart DB2.

**System Programmer Response:** Scan the SYS1.LOGREC entries looking for one or more DB2 abends immediately prior to the subsystem termination. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

**Problem Determination:** DB2 diagnostic information may be obtained through SYS1.LOGREC and SVC dump materials generated at the time of the original error. Refer to the accompanying abend code to determine the failure while in 'must complete' state. Refer to "DB2 abend completion codes" on page 8 for information about X'04F' and X'04E' abend completion codes.

If subsystem termination was requested by module DSNVEUS2, a standard MVS SVC dump will be generated.

The 'must complete' indicator is bit ACEMC. Latch-held indicators are in field EBLTCHLD. Latch waiter status information is in field EBLWSI.

Usually these conditions occur as the result of a prior failure where the associated recovery routine did not perform correct resource cleanup. The condition may also occur if a resource manager function does not release all latches and/or reset the 'must complete' bit before returning control to either DSNVEUS2 or DSNVEUS3.

**00E50706**

**Explanation:** Either an unrecoverable error occurred while processing an End-of-Task condition on a DB2 service task or an asynchronous service task terminated for reasons other than an explicit "Delete Service Task" request. An abend with this reason code is requested if the latter situation occurs.

This termination reason code is issued by the following CSECT: DSNVOT1

**System Action:** The subsystem is terminated with this reason code. Additionally, if no SDWA was provided to the recovery routine, a subsystem termination dump is requested.

**Operator Response:** Notify the system programmer of the failure and restart DB2.

**System Programmer Response:** Scan the SYS1.LOGREC entries looking for one or more DB2 abends immediately prior to the subsystem termination. If you suspect an error in DB2,
refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** If an SDWA was available, a DB2 dump of the original failure was requested and should be analyzed to determine the nature of the original error. If no SDWA was available, the standard MVS SVC dump taken by subsystem termination must be analyzed. Refer to Appendix A, "CICS Transaction Abend/Dump Code" on page 1049 for information about X'04F' and X'04E' abend completion codes.

---

**00E50707**

**Explanation:** An ESTAE could not be established to protect a service task, the service task controller, or the recovery control task. This is a subsystem termination reason code.

This reason code is issued by the following CSECTs:

DSNEVUS3 DSNEVUS4 DSNEVOT1 DSNVRCT

**System Action:** The DB2 subsystem is terminated.

**Operator Response:** Notify the system programmer, and restart DB2.

**System Programmer Response:** Review the usage and the free areas in the LSQA subpools of the two DB2 address spaces. If necessary, increase the private area size of the failing address space. If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

**Problem Determination:** If subsystem termination was requested by module DSNEVRCT, a standard MVS SVC dump was requested. If insufficient private storage is the cause of the problem, other DB2 resource managers may have abended.

Refer to Appendix A, "CICS Transaction Abend/Dump Code" on page 1049 for information about X'04F' and X'04E' abend completion codes.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 3, 5.

---

**00E50709**

**Explanation:** Subsystem termination was requested following a failure in a service task, the service task controller, or the recovery control task that could not be recovered by the ESTAE of the failing task.

This reason code is issued by the following CSECT: DSNVSTAI

**System Action:** The DB2 subsystem is abended.

**Operator Response:** Notify the system programmer, and restart DB2.

**System Programmer Response:** Scan the SYS1.LOGREC entries for one or more DB2 abends occurring immediately prior to the subsystem termination. Determine the registers and the failing task at the time of the error. If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** DB2 diagnostic information may be obtained through SYS1.LOGREC and SVC dump materials generated at the time of the original error. Refer to Appendix A, "CICS Transaction Abend/Dump Code" on page 1049 for information about X'04F' and X'04E' abend completion codes.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 3, 5.

---

**00E50710**

**Explanation:** An abend occurred while disconnecting an allied agent from its home address space. The disconnect function is required before the agent can be connected to the Systems Services address space and then terminated.

This termination reason code is issued by the following CSECT: DSNVDISC

**System Action:** The DB2 subsystem is terminated with this reason code.

**Operator Response:** Notify the system programmer of the failure and restart DB2.

**System Programmer Response:** Scan the SYS1.LOGREC entries looking for one or more DB2 abends immediately prior to the subsystem termination. If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** A DB2 dump of the original error was requested and a record entered into SYS1.LOGREC.

Refer to Appendix A, "CICS Transaction Abend/Dump Code" on page 1049 for information about X'04F' and X'04E' abend completion codes.

---

**00E50711**

**Explanation:** An error occurred in a latch manager function and the status of one or more execution units waiting for a latch is indoubt. The latch manager functional recovery routine could not determine whether all waiting execution units had been resumed.

This termination reason code is issued by the following CSECT: DSNVLFR

**System Action:** The DB2 subsystem is terminated with this reason code.
Problem Determination: Scan the SYS1.LOGREC entries for one or more DB2 abends immediately prior to the subsystem termination. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: A DB2 dump of the original error was requested and a record entered into SYS1.LOGREC. Refer to Appendix A, “CICS Transaction Abend/Dump Code” on page 1049 for information about X’04F’ and X’04E’ abend completion codes.

System Programmer Response: Scan the SYS1.LOGREC entries for one or more DB2 abends occurring immediately prior to the subsystem termination. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: A DB2 dump of the original error was requested and a record entered into SYS1.LOGREC. Refer to Appendix A, “CICS Transaction Abend/Dump Code” on page 1049 for information about X’04F’ and X’04E’ abend completion codes.

System Programmer Response: Scan the SYS1.LOGREC entries for one or more DB2 abends occurring immediately prior to the subsystem termination. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: A DB2 dump of the original error was requested and a record entered into SYS1.LOGREC. Refer to Appendix A, “CICS Transaction Abend/Dump Code” on page 1049 for information about X’04F’ and X’04E’ abend completion codes.

System Programmer Response: Scan the SYS1.LOGREC entries for one or more DB2 abends occurring immediately prior to the subsystem termination. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: A DB2 dump of the original error was requested and a record entered into SYS1.LOGREC. Refer to Appendix A, “CICS Transaction Abend/Dump Code” on page 1049 for information about X’04F’ and X’04E’ abend completion codes.

System Programmer Response: Scan the SYS1.LOGREC entries for one or more DB2 abends occurring immediately prior to the subsystem termination. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: A DB2 dump of the original error was requested and a record entered into SYS1.LOGREC. Refer to Appendix A, “CICS Transaction Abend/Dump Code” on page 1049 for information about X’04F’ and X’04E’ abend completion codes.

System Programmer Response: Scan the SYS1.LOGREC entries for one or more DB2 abends occurring immediately prior to the subsystem termination. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: A DB2 dump of the original error was requested and a record entered into SYS1.LOGREC. Refer to Appendix A, “CICS Transaction Abend/Dump Code” on page 1049 for information about X’04F’ and X’04E’ abend completion codes.

System Programmer Response: Scan the SYS1.LOGREC entries for one or more DB2 abends occurring immediately prior to the subsystem termination. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: A DB2 dump of the original error was requested and a record entered into SYS1.LOGREC. Refer to Appendix A, “CICS Transaction Abend/Dump Code” on page 1049 for information about X’04F’ and X’04E’ abend completion codes.
00E50725  00E50730

System Action: The DB2 subsystem is abended.

Operator Response: Notify the system programmer, and restart DB2.

System Programmer Response: Scan the SYS1.LOGREC entries for one or more DB2 abends occurring immediately prior to the subsystem termination. Register 3 contains the abend code of the original error. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Module DSNVSTAI was unable to generate a standard DB2 SYS1.LOGREC entry and SVC dump, because system diagnostic work area (SDWA) was not provided by the recovery termination management (RTM) facility of MVS. An MVS SVC dump was requested by system termination. To determine the location of the error, examine the RB structure of the failing TCB.

DB2 diagnostic information may have been obtained by other recovery routines if an abend preceded the subsystem termination. Refer to Appendix A, "CICS Transaction Abend/Dump Code" on page 1049 for information about X'04F' and X'04E' abend completion codes.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 3, 5.

00E50727

Explanation: A secondary failure occurred during agent services functional recovery processing. This is a subsystem termination reason code.

This reason code is issued by the following CSECTs:

DSNVEUS1  DSNVEUS2  DSNVST0  DSNVEOT1  DSNVSTAI

System Action: The DB2 subsystem is abended.

Operator Response: Notify the system programmer, and restart DB2.

System Programmer Response: Scan the SYS1.LOGREC entries for one or more DB2 abends occurring immediately prior to the subsystem termination. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem. Determine the functional recovery routine that failed and the registers at the time of the error.

Problem Determination: DB2 diagnostic information may be obtained through SYS1.LOGREC and SVC dump materials generated at the time of the original error. If the subsystem termination request was issued by module DSNVEUS2, an MVS SVC dump was requested. Refer to Appendix A, "CICS Transaction Abend/Dump Code" on page 1049 for information about X'04F' and X'04E' abend completion codes.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 3, 5.

00E50730

Explanation: A thread being processed through thread dealocation was found to still have an outstanding unit of recovery and is marked as being inflight. This is a subsystem termination reason code.

System Action: The DB2 subsystem is terminated with this reason code.

Operator Response: Contact the system programmer.

System Programmer Response: Scan the SYS1.LOGREC entries and associated console listing for one or more DB2 abends prior to subsystem termination. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: A DB2 dump of the error is requested and a record is entered into SYS1.LOGREC. Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 5.

This abend reason code is issued by the following CSECTs: DSNVIALC
X'E6 ......' Codes

This chapter contains Instrumentation Facility abend codes.

00E60000

Explanation: This reason code is used to indicate that information has been added to the SDWA variable recording area (VRA) following the data provided by the DSNWRCRD service. This is done so that anyone examining a SYS1.LOGREC entry can determine, from the reason code, what additional data has been placed in the VRA. The reason code is the first data item in the VRA, as mapped by macro IHAVRA.

This abend code is issued by the following CSECT: DSNWVCM1

System Action: The command being processed, failed. The DB2 subsystem remains operational.

Problem Determination: The diagnostic data table (DSNDDDT control block) should appear in the SDWA variable recording area.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 2, 5.

00E60008

Explanation: This reason code is used to indicate that MVS and DB2 dispatching units do not match. There is an internal DB2 dispatching unit problem which should not occur.

This abend code is issued by the following CSECT: DSNWVAPR

System Action: The function being traced is abended. The DB2 subsystem remains operational.

Problem Determination: The problem is either the ASID of EB primary (EBPASCE->ASCE->ASID) did not match the EPAR ASID, or the ASID of the EB home (EBHASCE->ASCE->ASID) did not match the MVS home dispatching unit (PSAAOLD->ASCBE->ASID), or the PSATOLD did not match the EBEXU field. Analyze the dump and previous SYS1.LOGREC entries do isolate the cause of the problem.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 5.

00E60086

Explanation: An internal logic problem occurred trying to obtain the MVS CML lock.

This abend reason code is issued by the following CSECTs: DSNWARDA, DSNWVOPX

System Action: The request is abended.

Problem Determination: This is an internal error.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 3, 5.

00E60100 through 00E60199

Explanation: The reason codes 00E60100 through 00E60199 are used by the instrumentation facility component (IFC) when a trace event occurs for which IBM service personnel have requested a dump using the IFC selective dump service aid.

This abend reason code is issued by the following CSECT: DSNWVAPR

System Action: The abending agent might be retried or terminated, depending upon the serviceability dump request.

Problem Determination: This is an internal error.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 3, 5.
# X'E6......' Reason Codes

# This chapter contains Instrumentation Facility Interface (IFI) reason codes. Where there are two numbers, the first number is the return code that DB2 places in field IFCARC1 of the IFI Communication Area (IFCA); the number after the slash is the reason code that DB2 places in field IFCARC2. Where there is a single number, that number is the reason code that DB2 places in field IFCAGRSN. See Appendix E (Volume 2) of DB2 Administration Guide for information on IFI.

## 00000004/00E60800

**Explanation:** The command was completed, but the return area was not large enough to accommodate all the output messages. The return area contains the last complete message segment that fit. The IFCABM field in the IFCA indicates the number of bytes moved to the return area. The IFCABNM field in the IFCA indicates the number of bytes which were not moved because the return area was too small.

This reason code is issued by the following CSECT:

- DSNWACMD

**User Response:** Allocate more storage for the return area, if desired, and reissue the request.

## 00000004/00E60801

**Explanation:** The command was partially completed, but an internal error was encountered. Check the return area for a message.

This reason code is issued by the following CSECT:

- DSNWACMD

**User Response:** Dependent upon the message in the return area.

## 00000004/00E60802

**Explanation:** The instrumentation facility request was partially completed, but the return area was not large enough to accommodate all the output. The return area contains the last complete record that fit. The IFCABM field in the IFCA indicates the number of bytes moved to the return area for the READS or READA request. The IFCABNM field in the IFCA indicates the number of bytes that could not fit in the return area.

This reason code is issued by the following CSECT:

- DSNWARDA

**User Response:** Allocate more return area storage and reissue the request.

## 00000004/00E60803

**Explanation:** No data was returned from the READA request because none was available. Either the OPn storage buffer was empty or the application program had already retrieved all the trace records.

## 00000004/00E60804

**Explanation:** No data was returned from the READS or READA request, or no data was returned for at least one of the requested IFCIDs on a READS request for multiple IFCIDs. This can happen for one of these reasons:
- The destination OPx value specified in the IFCA was not active for a READA request.
- The qualification information specified did not match a process for a READS request.
- No information was available for a READS request.
- The user return area on a READS or READA request was too small to receive even a single record.

This reason code is issued by the following CSECTs:

- DSNWAAPI, DSNWARDA, DSNWALCK, DSNWARDS

**User Response:** If the OPn destination was not active, then activate the OPn destination or issue the request using an OPn destination that is active.

If the IFCABNM field (number of bytes not moved) is nonzero, then the user return area is too small. Increase the size of the user return area, and resubmit the request.

## 00000004/00E60805

**Explanation:** The request for information resulted in an abend.

This reason code is issued by the following CSECT:

- DSNWAAPI

**User Response:** Dependent upon the abend code in the log record. Refer to the IFCABM field in the IFCA (the number of bytes moved to the return area) to determine if partial information was returned.

**Problem Determination:** See EREP log record in SYS1.LOGREC. See the Environmental Record Editing and Printing program (EREP) User's Guide and Reference for instructions on how to print SYS1.LOGREC.

## 00000004/00E60806

**Explanation:** The request for information resulted in an abend, perhaps because one of the parameters on the call was invalid. If a SYSUDUMP or SYSABEND DD statement is present in your JCL, you will receive an abend dump.

This reason code is issued by the following CSECT:

- DSNWAAPI

**User Response:** Dependent upon the abend code.

**Problem Determination:** See abend code in abend dump or EREP log record in SYS1.LOGREC. Examine the parameter list. Among other possible causes, the high-order bit of the last parameter must be on in order to indicate the end of the parameter list. See the Environmental Record Editing and Printing program (EREP) User's Guide and Reference for instructions on how to print SYS1.LOGREC.
Explanation: The request for information resulted in an abend, possibly because either the ACE token passed was invalid or became invalid during processing. In this case, no SDUMP is taken and control returns to the application program.

User Response: If your application program does not pass a token, you can reissue the previous IFI request from the application program.

Problem Determination: If the application program passes an ACE token, the token is probably invalid.

Explanation: The request for information resulted in an abend. Perhaps a DB2 structure became invalid while your application program was using it.

User Response: To reduce the chance of this occurring, issue requests from a task with a higher priority than DB2 and its users. Certain requests (for example, a READS for IFCIDs 0147 and 0148) are more likely to encounter this type of problem. The request may be reissused. No SDUMP is taken and control is returned to the application program.

Explanation: An IFI READS request for the IDCID 129 record was only partially successful. The request attempted to obtain CIs that have yet to be written. All available complete CIs were returned.

User Response: No response is needed. All available CI’s were returned.

Problem Determination: Examine the WQALLRBA and WQALLNUM fields of the READS request. (WQALLRBA + (WQALLNUM * 4KB)) > ending RBA of the last complete CI in the log.

Explanation: On a READS request for IFCID 316, the request was partially successful. The return area was not big enough to accommodate all the output. The return area contains as many complete records as can fit.

User Response: Allocate more return area storage and reissue the request.

Problem Determination: This reason code is issued by the following CSECT: DSNWATGS

Explanation: On a READS request for IFCID 316, no data was returned because no statements matched the qualification criteria. This error can happen when WQALFLTR = X’02’ and no cached statements exceed the threshold specified in WQALFVAL. This can also happen if the dynamic statement cache but no statements have yet been inserted into the cache.

User Response: Adjust the qualification criteria and reissue the request.

Explanation: A READS request for IFCID 317, no data was returned because a matching statement was not found.

User Response: Ensure that the statement identifier for a currently cached statement is provided and reissue the request.

Explanation: On a READS request for IFCID 316, no data was returned because no log records were found that met the criteria. No position is held in the log. The end-of-scope log point is returned in field QW0306ES, and the number of records is returned in field QW0306CT from the QW0306 section.

User Response: A WQALMODT request to terminate the log position might be necessary to release held resources, or a WQALMODF request after a pause to initiate a first call.

Problem Determination: This reason code is issued by the following CSECT: DSNWALRS

Explanation: On a READS request for IFCID 316, no data is returned because no log records were found that met the criteria. No position is held in the log. The end-of-scope log point is returned in field QW0306ES and zero is returned in field QW0306CT from the QW0306 section.

User Response: If this is caused by a WQALMODN call, issue a WQALMODF call after a pause to initiate a first call. However, there is still no guarantee that log records will be returned that meet the criteria.

Problem Determination: This reason code is issued by the following CSECT: DSNWALRS
**Explanation:** On a READS request for IFCID 0306, a WQALM OdT call was invoked to terminate log position when no position is held in the log.

**Problem Determination:** This reason code is issued by the following CSECT: DSNWALRS

### 00E60815
**Explanation:** On a READA or READS request for multiple members of a data sharing group, the return area was not large enough to hold all the data returned from other members.

**User Response:** Increase the size of the return area.

### 00E60816
**Explanation:** On a READA or READS request for multiple members of a data sharing group, no data was returned from other members of the data sharing group. This reason code is returned in field IFCAGRSN of the IFCA.

### 00E60820
**Explanation:** The command request did not complete normally. Check the IFCABM field in the IFCA to see if any message segments have been returned. There are many reasons for this condition, including:
- Command authorization failure
- Command processor abend
- Command syntax error
- Command output limit being exceeded.

This reason code is issued by the following CSECT: DSNWACMD

**Problem Determination:** To determine the reason for the failure, analyze the message or messages that are returned.

### 00E60821
**Explanation:** The request was not processed because a specified IFCID is not valid for the READS or WRITE function.

This reason code is issued by the following CSECT: DSNWAAPI

**User Response:** Remove or replace the invalid IFCID.

**Problem Determination:** Check the IFCA diagnostic area (IFCAD) for the IFCID in error.

### 00E60823
**Explanation:** The WRITE request was not processed because the IFCID specified was not active.

This reason code is issued by the following CSECT: DSNWAAPI

**User Response:** Activate the IFCID or reissue the request with a different IFCID.

### 00E60824
**Explanation:** An authorization failure occurred. On a READA request, the ownership token specified did not match the owner of an active trace, or on either a READA or READS request the user did not have the correct monitor authority.

This reason code is issued by the following CSECTs: DSNWARDA, DSNWARDS

**User Response:** Reissue the request with the correct ownership token for the desired OPn destination or obtain the appropriate monitor authority, as needed.

### 00E60825
**Explanation:** Stack storage was not available for copying the output area.

This reason code is issued by the following CSECTs: DSNWAAPI, DSNWARDS

### 00E60826
**Explanation:** On a READA request, the destination specified did not match a valid destination.

This reason code is issued by the following CSECT: DSNWARDA

**User Response:** Reissue the request using a valid destination.

### 00E60827
**Explanation:** On a READA request, the destination specified did not have an instrumentation facility buffer assigned. The application program must start a trace to the destination specified before attempting a READA request.

This reason code is issued by the following CSECT: DSNWARDA

**User Response:** Start a trace to the desired destination, and reissue the request.

### 00E60828
**Explanation:** On a READS request for IFCID 149 or 150, IRLM was not able to return all the data that was applicable to the queried agent or resource. IRLM can return a maximum of 32KB of lock data about a given agent or resource. If IRLM notifies DB2 that more than 32KB of lock data is applicable for a given agent or resource, then DB2 does not request the information from IRLM. No data is returned, and reason code 00E60828 is issued by IFl.

This reason code is issued by the following CSECT: DSNWALCK

**User Response:** The READS request for IFCID 149 OR 150 continues to return code 00E60828 until less than 32KB of lock data is applicable to the given agent or resource that the READS request for IFCID 149 or 150 is querying. You can continue to issue READS requests for IFCID 149 or 150 with no guarantee that the volume of lock data has decreased.
Explanation: On a READS request, an unexpected return code was received from IRLM.

This reason code is issued by the following CSECT: DSNWALCK

Explanation: An unexpected return code was received on a READS request.

This reason code is issued by the following CSECT: DSNWARDS

User Response: Reissue the request. If the condition persists, contact your IBM support center and tell them the message you are encountering.

Explanation: A number of abends have occurred while processing IFI requests resulting in the disabling of all IFI request and MONITOR trace processing.

This reason code is issued by the following CSECT: DSNWAAP

User Response: Issue a -START TRACE to clear the condition. This condition may not be cleared by issuing the -START TRACE command via instrumentation facility interface COMMAND function.

Problem Determination: Obtain a copy of the system or terminal log. If a dump was produced, have it printed. Print a copy of the contents of SYS1.LOGREC for the time period involved. Forward these items along with a copy of the system log to the systems programmer.

Explanation: The IFCID specified on a READS was not active.

This reason code is issued by the following CSECT: DSNWAAP

User Response: Issue a -START TRACE for monitor class 1.

Explanation: A request for storage from the log-read storage pool has failed due to exhaustion of available storage or four log-read read requests are already holding storage from the pool.

This reason code is issued by the following CSECT: DSNWAAP

User Response: Allow other active READS requests for IFCID 129 to finish and then reissue the request.

Problem Determination: Examine the activity of READS requests for IFCID 129. If requests for more than 64 CIs are active at the same time, storage problems may occur.

Explanation: An unexpected return code was received from log manager macro DSNJOLGR.

This reason code is issued by the following CSECT: DSNWAAP

User Response: Reissue the request. If the problem persists, contact your IBM service representative.

Problem Determination: Examine the validity of WQALLRBA and WQALLNUM fields.

Explanation: An unexpected return code was received from Log Manager Macro DSNJLGR.

This reason code is issued by the following CSECT: DSNWAAP

User Response: Reissue the request. If the problem persists, contact your IBM service representative.

Problem Determination: Examine the validity of WQALLRBA and WQALLNUM fields.

Explanation: An unexpected return code was received from log manager macro DSNJCLGR.

This reason code is issued by the following CSECT: DSNWAAP

User Response: Reissue the request. If the problem persists, contact your IBM service representative.

Problem Determination: Examine the validity of WQALLRBA and WQALLNUM fields.

Explanation: On an IFI READS request for IFCID 1 or 2, storage was not available to satisfy the request.

This reason code is issued by the following CSECT: DSNWASTA

User Response: Reissue the request. This condition is only temporary and should be extremely rare. If this condition persists, contact your IBM support representative, and tell them the message you are encountering.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 5.

Explanation: On a READS request for IFCID 0254, a resource was unavailable while attempting to collect statistics for a specific group buffer pool.

User Response: Reissue the request. If the problem persists, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The group buffer pool name and
the reason code returned from the internal macro are saved in fields IFCAGBP and IFCAR0B.

This reason code is issued by the following CSECT: DSNWATG

**00000008/00E60839**

**Explanation:** On a READS request for IFCID 149 or 150, IRLM was not able to return all the data that was available to the queried agent or resource. IRLM can return a maximum of 32KB of lock data about an agent or resource. If IRLM notifies DB2 that more than 32KB of lock data is available for that agent or resource, DB2 requests the information from IRLM, but returns up to 32KB of information to the application and IFI issues this reason code.

**Problem Determination:** This reason code is issued by the following CSECT: DSNWALCK

**00000008/00E6083A**

**Explanation:** On a READS request for IFCID 316 or IFCID 317 no data was returned because Dynamic Statement Caching is not active on this DB2 system.

**User Response:** The Dynamic Statement Cache must be activated through a system initialization parameter before READS requests can be processed for IFCID 316 or 317.

**0000000C/00E60840**

**Explanation:** An invalid function was specified. The function specified does not match one of the IFI supported functions.

This reason code is issued by the following CSECT: DSNWAAP

**User Response:** Correct the function field of the DSNWLI call so that it is a left-justified, 8-character field containing WRITE, READA, READS, or COMMAND.

**0000000C/00E60841**

**Explanation:** The IFA was specified incorrectly. The return code and reason code will be placed at the correct offset in the erroneous IFA. The IFA length might be invalid, or the IFA eye-catcher (IFCAID) might be missing.

This reason code is issued by the following CSECT: DSNWAAP

**User Response:** Examine the length of the IFA and the eye-catcher field of the IFA. Correct any mistakes.

**Problem Determination:** See the return and reason codes placed at the correct offset in the erroneous IFA.

**0000000C/00E60842**

**Explanation:** The return area was specified incorrectly. The length might be invalid. The length of the return area must be a fullword. The valid range for the return area length on IFI READS requests is X'000000064' to X'7FFFFFFF'. The valid range for the return area length on all other IFI requests is X'000000064' to X'00100000'.

This reason code is issued by the following CSECT: DSNWAAP

**User Response:** Respecify the return area length to conform to the valid range.

**0000000C/00E60843**

**Explanation:** The IFCID area was specified incorrectly. The length might be invalid. The valid range is from X'0006' to X'0044'.

This reason code is issued by the following CSECT: DSNWAAP

**User Response:** Respecify the IFCID area length field to conform to the valid range.

**Problem Determination:** Examine the length field of the IFCID area.

**0000000C/00E60844**

**Explanation:** The qualification area was specified incorrectly. The length might be invalid, or the WQAL eye-catcher (WQALEYE) might be missing.

This reason code is issued by the following CSECT: DSNWAAP

**User Response:** Correct any incorrect specification of the qualification area length and eye-catcher fields.

**Problem Determination:** Examine the length and eye-catcher fields of the qualification area.

**0000000C/00E60845**

**Explanation:** An IFCID specified for a READS or a WRITE request was invalid.

This reason code is issued by the following CSECT: DSNWAAP

**User Response:** Replace the errant IFCID with a valid one or remove it from the request.

**Problem Determination:** Check the IFCA diagnostic area for the IFCID in error.

**0000000C/00E60846**

**Explanation:** The output area was specified incorrectly.

This reason code is issued by the following CSECT: DSNWAAP

**User Response:** Correct either the output area length or the output area parameter on the DSNWLI call, depending on which one is in error.

**Problem Determination:** The length might be invalid; the valid range is from X'000A' to X'1000'. Also, the output area parameter on the DSNWLI call may have been specified as zero. The output area parameter must point to a valid output area.

**0000000C/00E60847**

**Explanation:** The buffer information area was specified incorrectly.

This reason code is issued by the following CSECT: DSNWAAP

**User Response:** Check that the buffer information area has an eye-catcher value of 'WBUF' and a length value equal to the length of 'WBUF' and correct any invalid values.

**Problem Determination:** The length might be invalid, or the 'WBUF' eye-catcher might be missing.
Explanation: The parameters are specified incorrectly on the IFI command request.

This abend reason code is issued by the following CSECT: DSNWAAP

User Response: If the selective dump function is not being used, check that the parameters are specified correctly on the IFI request. If the selective dump function is being used, notify the system programmer.

Problem Determination: If the selective dump function is not being used, check that the parameters are correctly specified on the command request. Among other possible causes, the high-order bit of the last parameter must be on in order to indicate the end of the parameter list. For assembler users, this can be done by using the VL option on the call. Another possible cause is the sixth parameter is specified on the IFI request. The sixth parameter is reserved for the selective dump function.

Explanation: An invalid WQALLTYP value was specified on a READS request.

This abend reason code is issued by the following CSECT: DSNWARDS

User Response: Correct the invalid WQALLTYP value and reissue the request.

Problem Determination: Examine the validity of the WQALLTYP field. It must be ‘CI’.

Explanation: An invalid WQALLMOD value was specified on a READS request.

This abend reason code is issued by the following CSECT: DSNWALOG

User Response: Correct the invalid WQALLMOD value and reissue the request.

Problem Determination: Examine the validity of the WQALLMOD field. It must be ‘F’ or ‘R’.

Explanation: An invalid WQALLRBA value was specified on a READS request. The starting CI log RBA must end in X’000’.

This abend reason code is issued by the following CSECT: DSNWARDS

User Response: Correct the invalid WQALLRBA value and reissue the request.

Problem Determination: Examine the validity of the WQALLRBA field. It must end in X’000’.

Explanation: An invalid WQALLNUM value was specified on a READS request. The valid range is X’0001’ to X’0007’.

This abend reason code is issued by the following CSECT: DSNWARDS

User Response: Correct the invalid WQALLNUM value and reissue the request.

Problem Determination: Examine the validity of the WQALLNUM field. The valid range is X’0001’ to X’0007’.

Explanation: The specified WQALLRBA was not in the active log.

This abend reason code is issued by the following CSECT: DSNWALOG

User Response: Correct the invalid WQALLRBA value and reissue the request.

Problem Determination: Examine the validity of the WQALLRBA field. Check the beginning RBA of the active log. The WQALLRBA field must be greater than or equal to the beginning RBA value of the active log. The RBA of the first CI in the active log will be returned in field IFCAFCI or it can be determined by running the print log map (DSNJU004) utility.

Explanation: A log RBA value past the end of the current active log was specified. The specified WQALLRBA value was beyond the end of the log. The CI has yet to be written.

This abend reason code is issued by the following CSECT: DSNWALOG

User Response: Correct the invalid WQALLRBA value and reissue the request.

Problem Determination: Examine the validity of the WQALLRBA field. Check the ending RBA of the log. The WQALLRBA field must be less than the ending RBA value.

Explanation: No complete CI’s are available from the RBA specified in WQALLRBA.

This abend reason code is issued by the following CSECT: DSNWALOG

User Response: Lower the value in WQALLRBA by at least X’1000’ or wait until at least one CI has been written beyond the RBA specified in WQALLRBA and reissue the request.

Problem Determination: Examine the WQALLRBA field and determine whether or not one complete CI beyond WQALLRBA has been written to the log.

Explanation: This code indicates that an IFI READS request for IFCID 185 contained an invalid WQALCDCD value.

System Action: Control returns to the user program with return code 000000C in field IFCARC1 and reason code 00E60857 in field IFCARC2.

User Response: WQALCDCD is a user-specified field in the QUAL_AREA of an IFI READS for IFCID 185. Reissue the request with a valid WQALCDCD value. For IFI READS
requests for IFCID 185, the valid values are A, Y, and N. If a value is not specified, a value of A is used as the default.

**0000000C/00E60858**

**Explanation:** This code indicates that an IFI READS request for IFCID 185 was denied because the system parameters indicate that data capture processing is not allowed on this DB2 system. The system parameter field SPRMCDC is set to 'no'.

**System Action:** Control returns to the user program with return code 0000000C in field IFCARC1 and reason code 00E60858 in field IFCARC2.

**User Response:** Inspect system parameter SPRMCDC. If change data capture is not allowed on this system, consult with the database administrator to determine if the system parameter should be changed to 'yes' to allow DB2 data capture processing.

**00000008/00E60859**

**Explanation:** On a READS request for IFCID 129 was made to pass the last partially full log CI to the log exit, but the log exit is not active. Either the log exit (DSNJW117) was not installed, or an error in the exit has deactivated the exit.

This reason code is issued by the following CSECT: DSNWALLOG

**User Response:** Either install the log capture exit, or look for message DSNJ150E indicating that the log capture exit has been deactivated. See the description for DSNJ150E for more information about reactivating the log capture exit.

**0000000C/00E60860**

**Explanation:** On a READS request for IFCID 0254, an error was encountered while collecting statistics for a group buffer pool.

**User Response:** Reissue the request. If the problem persists, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** The group buffer pool name is saved in field IFCAGBPN. The reason and return code from the internal macro are saved in fields IFCAR0B and IFCAR1B.

This reason code is issued by the following CSECT: DSNWATGS

**0000000C/00E60861**

**Explanation:** An invalid WQALGBPN value was specified on a READS request.

**User Response:** Correct the invalid WQALGBPN value and reissue the request.

**Problem Determination:** Examine the validity of the WQALGBPN field. The qualifier is an 8-byte group buffer pool name in which an imbedded X ‘00’ is used as a pattern character.

This reason code is issued by the following CSECT: DSNWATGS

---

**00000008/00E60863**

**Explanation:** On a READS request for IFCID 0306, a resource was unavailable while attempting to read the log.

**User Response:** Reissue the request. If the problem persists, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** This reason code is issued by the following CSECT: DSNWALRS

**00000008/00E60864**

**Explanation:** On a READS request for IFCID 0306, the return area supplied was not large enough to hold one log record. No log record is returned, but position is held in the log.

**User Response:** Increase the size of the return area and issue a WQALMODN request. If the problem persists, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** The size of the return area required is returned in field IFCABSRQ of the IFCA return area.

This reason code is issued by the following CSECT: DSNWALRS

**00000008/00E60865**

**Explanation:** On a READS request for IFCID 0306, no data is returned for a WQALMODF call because log position is already held in the log, possibly by a previous WQALMODF call.

**User Response:** You might want to use a WQALMODN request instead.

**Problem Determination:** This reason code is issued by the following CSECT: DSNWALRS

**00000008/00E60866**

**Explanation:** On a READS request for IFCID 0306, no data is returned for a WQALMODN call because no log position is held in the log.

**User Response:** A WQALMODF call might be necessary before a WQALMODN call.

**Problem Determination:** This reason code is issued by the following CSECT: DSNWALRS

**00000008/00E60867**

**Explanation:** An invalid WQALLRBA value was specified on a READS request for IFCID 0306. The specified value exceeds the end-of-log.

**User Response:** Correct the WQALLRBA field. A pause might also be necessary before you issue a WQALMODF request again.

**Problem Determination:** This reason code is issued by the following CSECT: DSNWALRS
0000000C/00E60868
Explanation:  The return area was specified incorrectly for IFCID 0306. The return area did not reside in ECSA storage.
User Response:  Respecify the return area and make sure that it resides in ECSA storage.
Problem Determination:  This reason code is issued by the following CSECT: DSNWALRS

0000000C/00E60869
Explanation:  An invalid WQALLCRI field was specified on a READS request for IFCID 0306.
User Response:  Correct the invalid WQALLCRI field and reissue the request.
Problem Determination:  Check the validity of the WQALLCRI field. It must be X'00'.
This reason code is issued by the following CSECT: DSNWALRS

0000000C/00E60870
Explanation:  An invalid WQALLOPT field was specified on a READS request for IFCID 0306.
User Response:  Correct the invalid WQALLOPT field and reissue the request.
Problem Determination:  Check the validity of WQALLOPT field. It must be X'00' or X'01'.
This reason code is issued by the following CSECT: DSNWALRS

00000008/00E60871
Explanation:  On a READS request for IFCID 306, log records are returned, but data is not decompressed as requested.
This reason code is issued by the following CSECT: DSNWALRS
Problem Determination:  See the reason code in field QW0306DG to determine why decompression was not performed. One reason code can be 00C90064, which means that the decompression dictionary changed since the log record was written.

00000008/00E60872
Explanation:  On a READS request for IFCID 0306, no data is returned for a WQALMODF call because log position is already held in the log, possibly by a previous WQALMODF or WQALMOODN call.
User Response:  If WQALMODF is desired, make sure that a WQALMODT call has been issued first.
Problem Determination:  This reason code is issued by the following CSECT: DSNWALRS

0000000C/00E60873
Explanation:  On a READS request for IFCID 0306, no data is returned for a WQALMODF call because the RBA supplied was too old. This is because DB2 has migrated into and out of or out of data sharing mode.
User Response:  The change of mode into and out of data sharing also changes the log sequencing from RBA to LRSN and back to RBA. A log read application that is sensitive to log sequencing should take an appropriate action. A cold start of the application might be necessary.
Problem Determination:  This reason code is issued by the following CSECT: DSNWALRS

# 0000000C/00E60874
Explanation:  An invalid value was specified for WQALFLTR on a READS request for IFCID 316. See the definition in the DSNDWQAL parameter block for valid values.
User Response:  Correct the invalid WQALFLTR value and reissue the request.

# 0000000C/00E60875
Explanation:  An invalid value was specified for WQALFFLD on a READS request for IFCID 316. See the definition in the DSNDWQAL parameter block for valid values. This error might also be issued if WQALFLTR = X'02' is specified with WQALFFLD = 'A'.
User Response:  Correct the invalid WQALFFLD value and reissue the request.
X'E6......' Abend Codes

This chapter contains Instrumentation Facility (IFI) abend codes.

00E60886

Explanation: This reason code is used to indicate that an invalid IAMQ function was passed to module DSNWVZXT. This problem should not occur.

This abend code is issued by the following CSECT: DSNWVZXT

System Action: The function requested is abended. The DB2 subsystem remains operational and the functional recovery will retry if possible.

Problem Determination: The IAMQ function requested does not match a function handled by DSNWVZXT. Analyze the dump and previous SYS1.LOGREC entries do isolate the cause of the problem.

Collect the following diagnostic items listed in Appendix B

Problem determination” on page 1051 1, 2, 5.

00E60887

Explanation: The reason code is set by the Instrumentation Statistics Facility FRR routine when an abend condition occurs during statistics gathering. The reason code only appears in the VRA data of SYS1.LOGREC to indicate the WWAB block exists in the variable recording area following the standard DB2 information.

This code is issued by the following CSECT: DSNWVZSS

System Action: Depending on the number of errors the Instrumentation Statistics Facility may be turned off. The FRR will attempt a retry to RTM to keep the DB2 subsystem operational.

System Programmer Response: The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA). If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Normally the SYS1.LOGREC standard entries provide the necessary information to isolate the failing module. The WWAB control block in the variable recording area provides the resource manager RMID last called (WWABRMID) and the RMID of which resource manager Instrumentation Statistics Facility called when the failure occurred (WWABFRMS). If WWABFRMS is binary zero, then the error occurred in the Instrumentation Accounting Facility.

00E60900

Explanation: This is an informational code. One or more data rows defined with DATA CAPTURE CHANGES might not have been retrieved.

This abend code is issued by the following CSECTs: DSNILEDA, DSNWACDC

System Action: All successfully retrieved data rows defined with DATA CAPTURE CHANGES are returned in the return area. One header instance of 0185 is returned for each data row associated with a failure or warning. A reason code in field QW0185RC in the header indicates the reason for the failure or warning.

Problem Determination: Inspect the reason code in QW0185RC to determine the cause of each failure or warning.

00E60901

Explanation: The available buffer is not large enough to hold the largest 0185 record instance.

This abend code is issued by the following CSECT: DSNILESP

System Action: No data is returned.

User Response: Reissue the IFI READS request for IFCID 0185 with a larger return area. The suggested size of the new area is 4KB more than the original size.

00E60902

Explanation: The IFI READS request for IFCID 0185 is invalid. The READS request tried to retrieve captured DB2 table changes, but no data was captured for the current SQL statement.

This abend code is issued by the following CSECT: DSNILEDA

System Action: No data is returned.

User Response: Ensure that the IFI READS request follows the current SQL statement and precedes any subsequent SQL statement. Captured data must be retrieved at the time of the SQL call.

© Copyright IBM Corp. 1982, 1999 933
00E60903

Explanation: One or more data rows marked with DATA CAPTURE CHANGES were not retrieved. In addition, there is insufficient space in the return area to hold all the data in an IFI READS request for IFCID 0185. This is a combination code for 00E60900 and 00E60802.

This abend code is issued by the following CSECT: DSNILESP

System Action: As many complete 0185 records as can fit are returned in the return area. Also, one 0185 header record is returned for each failed data row. The reason code in field QW0185RC in the header indicates the reason for the failure.

User Response: Refer to the description of reason codes 00E60900 and 00E60802 for details.

00E60904

Explanation: The IFI READS request for IFCID 0185 could not be executed successfully because a resource was not available. Some 0185 record instances might have been returned to the return area before the problem occurred.

This abend code is issued by the following CSECT: DSNILEDA

System Action: The last 0185 record instance returned is type D (QW0185TP = D). Field QW0185RC contains a reason code for the specific unavailable resource. In addition, the data portion (QW0185DR) of this record instance contains the following message:

UNSUCCESSFUL EXECUTION CAUSED BY AN UNAVAILABLE RESOURCE. REASON reason, TYPE OF RESOURCE type, AND RESOURCE NAME name

In the message, reason is identical to field QW0185RC. The variables type and name identify the specific resource that is unavailable at the time.

User Response: Retrieve all returned record instances. Examine the reason code (QW0185RC) for each instance for other possible errors or warnings. Use the reason code in QW0185RC and the error message in QW0185DR to determine why the resource is unavailable. Refer to "Resource types on page 1053 in Appendix B, Problem determination" for an explanation of resource type codes. Refer to "Section 4. DB2 Codes on page 577" for an explanation of the given reason code.

00E60A00

Explanation: A down-level data description was detected. A requester specified no data description to be returned in an IFI READS request for IFCID 0185. That is, the WQALCDCD field of the qualification area is set to N, but a description change (ALTER TABLE ADD) that requires a refresh of the data row section for this table. The message listed above takes its place. The length of the record corresponds to the message length.

This abend code is issued by the following CSECT: DSNILEDS

System Action: This reason code is only issued once for each table within each SQL scope. The 0185 record instance that contains this reason code has the header portion only. Moreover, contents of all time stamp, log RBA, and operation code fields in the header are all zeros.

User Response: The requester can issue an SQL DESCRIBE to get the new description, or can consider changing the DataPropagator NonRelational (DPropNR) exit routine to set WQALCDCD to A or Y.

00E60A01

Explanation: The data row marked with DATA CAPTURE CHANGES is rejected by the installation-defined edit procedure ‘proc-name’ for the object table. This reason code does not apply to the success or failure of the IFI request, but rather the status of the data in the IFCID 0185 record.

This abend code is issued by the following CSECT: DSNILEDR

System Action: The following message is returned in the data area of 0185:

VIOLATION OF INSTALLATION DEFINED EDIT PROCEDURE proc-name.
REASON CODE: reason-code

In the message, proc-name is the edit procedure name and reason-code is EXPLRC2 returned by the edit procedure.

User Response: Examine the edit procedure for any errors. If it is not an edit procedure error, determine the requirements imposed by the edit procedure.

00E60A08

Explanation: The following message is returned in the data portion of the data row area in the 0185 trace record:

COLUMN column_name ON TABLE table_name IN VIOLATION OF INSTALLATION DEFINED FIELD PROCEDURE. RT: return_code, RS: reason_code, MS: message_token.

An installation field procedure returned an error indicated by return_code for column column_name on table table_name. Use return_code to determine the problem. The return code can be:

4 Invalid value on decode
8 Invalid parameter value
12 Field procedure error on any function

Use reason_code and message_token for additional information. This reason code does not apply to the success or failure of the IFI request, but to the status of the data in the IFCID 0185 record.

This abend code is issued by the following CSECT: DSNXRCDC

System Action: Whenever this reason code is present in the QW0185SRC field in the record header, no record is returned in the data row section for this table. The message listed above takes its place. The length of the record corresponds to the message length.

Programmer Response: Examine the field procedure for any errors. If it is not a field procedure error, determine the requirements imposed by the field procedure.

00E60A09

Explanation: The following message is returned in the data portion of the data row area in the 0185 trace record:

INCORRECT DATA RETURNED FROM FIELD PROCEDURE fieldproc_name FOR TABLE table_name AND COLUMN column_name, MS: message_token

Unexpected data was returned from field procedure fieldproc_name and for column column_name on table...
The following message was returned in the data portion of the data row area in the 0185 trace record:

AN INSTALLATION FIELD PROCEDURE HAS RETURNED A RETURN CODE IN REGISTER 15 OTHER THAN AN EXPECTED 0 OR 4

This indicates that an installation field procedure returned an unexpected error. This reason code does not apply to the success or failure of the IFI request, but to the status of the data in the IFCID 0185 record.

This abend code is issued by the following CSECT: DSNXRCDC

System Action: Whenever this reason code is present in the QW0185RC field in the record header, no record is returned in the data row section for this table. The message listed above takes its place. The length of the record corresponds to the message length.

Programmer Response: Correct the field procedure so that it returns values and their descriptions that are mutually consistent.

00E60A0B

Explanation: This is a warning code, and does not represent an error. For the corresponding data row with this reason code in field QW0185RC, a date or time column value was returned in the ISO format, even though the date/time installation option was specified as LOCAL. Invocation of local date and time exits is not supported for captured data. This reason code does not apply to the success or failure of the IFI request, but to the status of the data in the IFCID 0185 record.

This abend code is issued by the following CSECT: DSNXRCDC

System Action: A date or time column value was returned in the ISO format even though the installation option was specified as LOCAL.

Programmer Response: The requester needs to be aware that a date or time was returned in ISO format since the LOCAL date and time installation option, which was in effect at the time of capture, is not supported for data capture.

00E60B03

Explanation: An internal inconsistency was detected by DB2 during data propagation processing.

This abend code is issued by the following CSECTs: DSNXIBCD, DSNXIBCL, DSNXIBC2, DSNXIBGE

System Action: An execution unit requests an SVC dump. The execution unit then terminates abnormally.

Operator Response: Notify the system programmer.

Problem Determination: At the time of abend, register 2 points to the error message. Collect the following diagnostic items listed in Appendix B, "Problem Determination"; 1, 2, 5.
**System Action:** An execution unit requests an SVC dump, and terminates abnormally.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** The current SQL statement performed an INSERT, UPDATE, or DELETE, for a DB2 table that was defined with DATA CAPTURE CHANGES. The captured data changes are reflected in the DB2 log.

Check the captured table data information returned to DPROP for propagation to determine which data type is invalid.

Refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.
X'E7......' Codes

00E70004

Explanation: An inconsistency has been detected in the subsystem catalog tables.

This abend reason code is issued by the following CSECTs: DSNXOCK, DSNXOLV

System Action: The application program abends.

Operator Response: Notify the system programmer or database administrator.

System Programmer Response: Notify the database administrator if appropriate. Otherwise, use the information under the Problem Determination section to resolve the problem.

Problem Determination: The module name and the name of the inconsistent subsystem catalog table can be found in the SQLCA. Refer to Section 4 of DB2 Diagnosis Guide and Reference for information about how to find the SQLCA.

Register 7 is the cursor table pointer and is always restricted entirely over the relational data system (RDS) subcomponent.

Dump the page set containing the inconsistent subsystem catalog using the DUMP option of the REPAIR utility.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051  2, 48.

00E70005

Explanation: A relational data system (RDS) subcomponent internal inconsistency was detected.

This abend reason code is issued by the following CSECTs: Any of the RDS modules

System Action: The application program abends.

Operator Response: Notify the system programmer.

System Programmer Response: This code generates an SVC dump and SYS1.LOGREC entries. Use information from those two sources and from the Problem Determination section of this code to resolve the problem. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The abend code may be issued by any of the RDS interpreter modules (DSNX...). The module name appears in the SQLCA. SQLERRD1 in the SQLCA contains a unique code that identifies the location within the module at which the error was detected. SQLERRM contains information describing the particular error.

Refer to Section 4 of DB2 Diagnosis Guide and Reference for information about how to find the SQLCA.

Collect the following diagnostic item listed in Appendix B, "Problem determination" on page 1051  2.

00E70006

Explanation: An internal inconsistency has been reported to the relational data system (RDS) subcomponent by the RDS subcomponent of DB2.

This abend reason code is issued by the following CSECTs: Any of the RDS interpreter modules

System Action: The application program abends.

User Response: Notify the system programmer.

System Programmer Response: Use the information in the 'Problem Determination' section of this message to resolve the problem.

Problem Determination: The abend code can be issued by any of the RDS interpreter modules (DSNX...). The module name appears in the SQLCA. SQLERRD1 in the SQLCA contains a unique code that identifies the location within the module at which the error was detected. SQLERRM contains information describing the particular error.

Refer to Section 4 of DB2 Diagnosis Guide and Reference for information about how to find the SQLCA.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051  2.

00E70007

Explanation: A bad application-supplied address was encountered while trying to copy SQLCA back to the application program.

This abend reason code is issued by the following CSECT: DSNXERD

System Action: The application program abends.

System Programmer Response: Contact the application programmer.

Problem Determination: The register contents at the time of abend are as follows:

R2 A decimal code identifying the data:
1 FRB address is bad.
2 FRBPARM has the bad address used to locate the RDIIN.
18 RDICODEP has the bad address used to locate the SQLCA.

R3 The bad application data area address.

R4 The length of the data.

R5 The key of the data or the address of the CT if the SQLCA contains SQLCODE -902.

R8 The address of the FRB in the application address space (RDIIN) or the address of the RDA if the SQLCA contains SQLCODE -902.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051  4 or 23.
**Explanation:**
An invalid value was returned by the Access Control Authorization exit routine, DSNX@XAC.

**System Action:**
The authorization check is abended. An SVC dump is requested by DB2 functional recovery.

**Operator Response:**
Notify the system programmer.

**System Programmer Response:**
If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:**
The abend with this reason code is issued because the access control authorization exit routine returned an invalid value in one of the return fields. The register contents at the time of abend are set as follows:

- **Register 3** points to the field that has the invalid value. This field may be in the EXPL or XAPL control block. The control block eye catcher will enable you to distinguish between the two.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 5.

This abend reason code is issued by the following CSECTs: DSNXACAE

---

**Explanation:**
A relational data system (RDS) subcomponent abended because one or more parallel tasks abended.

**System Action:**
The application program abends.

**Operator Response:**
Notify the system programmer.

**System Programmer Response:**
Use the information in the Problem Determination section of this message to resolve the problem.

**Problem Determination:**
If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 5.

This abend code is issued by the RDS modules that detect abends of other parallel tasks.

This abend reason code is issued by the following CSECTs: DSNXRFG, DSNXRGN

---

**Explanation:**
The application program supplied an invalid address.

This abend reason code is issued by the following CSECTs: DSNXEC, DSNXRIV, DSNXROUT, DSNXERT, DSNXVPN, DSNXRSPA, DSNXCALC, DSNXEC, DSNXEPM

**System Action:**
The application program abends.

**User Response:**
Correct the invalid address. See Problem Determination for instructions on how to determine the failing SQL statement and the bad address. Use this information to determine the application's incorrect setting of the address. For further information, refer to Section 6 of DB2 Application Programming and SQL Guide.

**Operator Response:**
Notify the user or system programmer.

**System Programmer Response:**
Assist the user in determining the invalid address.

**Problem Determination:**
At the time of abend the register contents are:

R2 A decimal code identifying the bad data:
1 (1) The bad FRB address used to locate the FRBPARM.
2 (2) FRBPARM has the bad address used to locate the RDIIN.
3 (3) RDIVPARM has the bad address used to locate the SQDABC.
4 (4) RDIAUXPA has the bad address used to locate the SQDABC.
5 (5) RDIAUXPA has the bad address used to locate the SQDABC.
6 (6) RDIAUXPA has the bad address used to locate the SQLDA length.
7 (7) RDIAUXPA has the bad address used to locate the SQLDA length.
8 (8) PVDPTR has the bad address used to locate the data variable.
9 (9) PVINFO has the bad address used to locate the indicator variable.
10 (A) Either RDIVPARM or RDIAUXPA has the bad address used to locate the PVARS structure.
11 (B) RDIAUXPA has the bad address used to locate the SQLN.
12 (C) RDIAUXPA has the bad address used to locate the SQDAD.
13 (D) RDIAUXPA has the bad address used to locate the SQDABC.
14 (E) RDIAUXPA has the bad address used to locate the SQLD.
15 (F) RDIAUXPA has the bad address used to locate the SQLVAR.
16 (10) PVINFO has the bad address used to locate the indicator variable.
17 (11) PVDPTR has the bad address used to locate the data variable.
18 (12) PVDPTR has the bad address used to locate the data variable.
19 (13) PVDPTR has the bad address used to locate the data variable.

R3 The bad data address.
R4 The length of the data.
R5 The key of the data.
R8 If register 2 = 8 or 9, R8 contains the address of the RDIVPARM. If register 2 = 16 or 17, R8 contains the address of the RDIAUXPA. Otherwise, R8 contains the address of the RDIIN. This is the application’s invocation parameter list. The address of the RDIIN may not be valid if the RDIIN could not be located (Register 2 = 1 or 2).

The program name identifies the failing program. The statement number refers to the statement number in the DB2 pre-compiler listing. The SQL statement executed can then be
found in the application program’s compiler/assembler listing. For example, if the statement number is X ‘00E6’, refer to statement number 230 in the DB2 precompiler listing. This precompiler statement number can be cross-referenced to the program’s compiler/assembler listing.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 4 or 23.

Use the following offsets to trace through the control blocks.

**PVARS:**

<table>
<thead>
<tr>
<th>Offsets</th>
<th>Len</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 (0)</td>
<td>4</td>
<td>LENGTH OF BLOCK</td>
</tr>
<tr>
<td>4 (4)</td>
<td>12</td>
<td>PVENTRY, OCCURS ONCE FOR EACH HOST VARIABLE IN THE SQL STATEMENT</td>
</tr>
</tbody>
</table>

**PVENTRY:**

<table>
<thead>
<tr>
<th>Offsets</th>
<th>Len</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 (0)</td>
<td>2</td>
<td>COLUMN TYPE</td>
</tr>
<tr>
<td>2 (2)</td>
<td>2</td>
<td>COLUMN LENGTH</td>
</tr>
<tr>
<td>4 (4)</td>
<td>4</td>
<td>PVDPTR, POINTER TO HOST VARIABLE DATA</td>
</tr>
<tr>
<td>8 (8)</td>
<td>4</td>
<td>PVINFO, POINTER TO INDICATOR</td>
</tr>
</tbody>
</table>

**FRB:**

<table>
<thead>
<tr>
<th>Offsets</th>
<th>Len</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 (0)</td>
<td>4</td>
<td>BLOCK IDENTIFIER “FRB”</td>
</tr>
<tr>
<td>4 (4)</td>
<td>2</td>
<td>RAL ENTRY NUMBER</td>
</tr>
<tr>
<td>6 (6)</td>
<td>2</td>
<td>FVL ENTRY NUMBER</td>
</tr>
<tr>
<td>8 (8)</td>
<td>4</td>
<td>FRBPARM, POINTER TO PARAMETER LIST (RDIIN)</td>
</tr>
<tr>
<td>12 (C)</td>
<td>2</td>
<td>PARAMETER COUNT</td>
</tr>
<tr>
<td>14 (E)</td>
<td>2</td>
<td>RETURN CODE</td>
</tr>
<tr>
<td>16 (10)</td>
<td>4</td>
<td>REASON CODE</td>
</tr>
<tr>
<td>20 (14)</td>
<td>4</td>
<td>FEEDBACK</td>
</tr>
<tr>
<td>24 (18)</td>
<td>4</td>
<td>PRH PC LX/EX VALUE</td>
</tr>
<tr>
<td>28 (1C)</td>
<td>2</td>
<td>REQUEST QUALIFIER VALUE</td>
</tr>
<tr>
<td>30 (1E)</td>
<td>2</td>
<td>RESERVED</td>
</tr>
<tr>
<td>32 (20)</td>
<td>0</td>
<td>END OF USER FRB SECTION</td>
</tr>
</tbody>
</table>

**RDIIN:**

<table>
<thead>
<tr>
<th>Offsets</th>
<th>Len</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 (0)</td>
<td>2</td>
<td>PARM LIST LENGTH</td>
</tr>
<tr>
<td>2 (2)</td>
<td>2</td>
<td>FLAGS</td>
</tr>
<tr>
<td>4 (4)</td>
<td>2</td>
<td>CALL TYPE</td>
</tr>
<tr>
<td>6 (6)</td>
<td>8</td>
<td>PROGRAM NAME</td>
</tr>
<tr>
<td>14 (E)</td>
<td>8</td>
<td>TIMESTAMP</td>
</tr>
<tr>
<td>22 (16)</td>
<td>2</td>
<td>SECTION #</td>
</tr>
<tr>
<td>24 (18)</td>
<td>4</td>
<td>PTR TO ERROR CODE STRUCTURE</td>
</tr>
<tr>
<td>28 (1C)</td>
<td>4</td>
<td>RDIVPARM PTR TO USER INPUT VARIABLES (PVARS STRUCTURE)</td>
</tr>
<tr>
<td>32 (20)</td>
<td>4</td>
<td>RDIAUXPA PTR TO DB2 RETURN VARIABLES (PVARS STRUCTURE)</td>
</tr>
<tr>
<td>36 (24)</td>
<td>2</td>
<td>STATEMENT #</td>
</tr>
<tr>
<td>38 (26)</td>
<td>2</td>
<td>STATEMENT TYPE</td>
</tr>
</tbody>
</table>

---

**00E7000F**

**Explanation:** A deadlock condition has been detected.

This abend reason code is issued by the following CSECT:

- DSNXIDPM DSNXICSQ

**System Action:** The requested operation is not performed.

**User Response:** Rerun the application.

**System Programmer Response:** If the deadlock condition becomes chronic, examine the mix of applications running to determine why the deadlock is occurring.

**Problem Determination:** The requested operation is not performed. Message DSNT375I and an SQLCODE -904 or SQLCODE -911 is issued. For more information, refer to the SQL code or to the description of the DSNT375I message.

---

**00E70010**

**Explanation:** A timeout condition has been detected.

This abend reason code is issued by the following CSECT:

- DSNXIDPM DSNXICSQ

**System Action:** The requested operation is not performed.

**User Response:** Rerun the application.

**Problem Determination:** The requested operation is not performed. Message DSNT376I and an SQLCODE -904 or SQLCODE -911 is issued. For more information, refer to the SQL code or to the description of the DSNT376I message.

---

**00E70011**

**Explanation:** During an authorization check for plan or command authorization, an execution unit switch took place to a new execution unit and the new execution unit abended.

This abend reason code is issued by the following CSECTs: Any module that invokes the DSNXCHK macro

**System Action:** The calling execution unit is also abended.

**Operator Response:** Notify the system programmer. Print SYS1.LOGREC. Also print the dump from any previous dump data set if the failing module name is DSNXACKP or the dump title is ‘RDS AUTHCHK’.

**System Programmer Response:** See problem determination and if you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Problem Determination: The module issuing this abend reason code has invoked the DSNXCHK macro to perform an authorization check for either the application plan or the command authorization. The DSNXCHK macro does a cross-memory execution unit switch to module DSNXACKP. Look for a previous dump in which the failing module name is DSNXACKP, the dump title is RDS AUTHCHK, or the failure is an allocation failure.

Collect the following diagnostic items listed in Appendix B, \textit{Problem determination} on page 1051.

\textbf{00E70012}

\textbf{Explanation:} A user exit has written beyond the end of the output buffer.

This abend reason code is issued by the following CSECTs: DSNXRPPC, DSNXVTRS

\textbf{System Action:} The application program abends.

\textbf{Operator Response:} Notify the system programmer.

\textbf{System Programmer Response:} Correct the exit routine. If you suspect an error in DB2, refer to Section 3 of \textit{DB2 Diagnosis Guide and Reference} for information on identifying and reporting the problem.

\textbf{Problem Determination:} At the time of abend the register contents are:

- R2 contains the first 4 characters of the exit routine name.
- R3 contains the next 4 characters of the exit routine name.

If the exit routine name is DSNXVDTX then DECPDLEN contains the LOCAL DATE LENGTH specified on the DB2 Installation Application Programming Defaults Panel. The exit routine wrote beyond this length in returning a local date format to DB2.

If the exit routine name is DSNXVDTX then DECPDLEN contains the LOCAL DATE LENGTH specified on the DB2 Installation Application Programming Defaults Panel. The exit routine wrote beyond this length in returning a local date format to DB2.

\textbf{00E70013}

\textbf{Explanation:} DRDS at the server site supplied an invalid address.

This abend reason code is issued by the following CSECTs: DSNXECP, DSNXEDC, DSNXRVB, DSNXROUT

\textbf{System Action:} A record is written to SYS1.LOGREC and an SVC dump is requested.

\textbf{Operator Response:} Notify the system programmer.

\textbf{System Programmer Response:} This is a DB2 internal error.

Collect the following diagnostic items listed in Appendix B, \textit{Problem determination} on page 1051.

\textbf{00E70014}

\textbf{Explanation:} DB2 could not validate the data definition control support tables during startup.

\textbf{System Action:} The requested operation is not performed.

\textbf{Operator Response:} Notify the system programmer.

\textbf{System Programmer Response:} Provide a print of the SVC dump to the system programmer. Use the information in the \textit{Problem Determination} section. The data definition control support tables could not be validated. No data definition SQL statements can be executed until these tables can be validated.

Register 2 contains the address of a message that indicates the reason for the problem. DB2 startup continues. Correct the problem if it still exists. DB2 will attempt to validate the data definition control support tables when the user attempts to execute any data definition SQL statements.

Collect the following diagnostic item listed in Appendix B, \textit{Problem determination} on page 1051.

\textbf{00E7006A}

\textbf{Explanation:} While processing your request, the IMS Attachment Facility could not identify the DB2 subsystem. The DB2 identification must be defined to the IMS control region, the DL/I batch region, and any dependent region accessing the DB2 subsystem.

This abend reason code is issued by the following CSECTs: DSNMSNO0, DSNMERR0

\textbf{System Action:} The connection is not established.
System Programmer Response: To make the identification to the IMS regions, you must create a subsystem member (SSM) in the IMSVS.PROCLIB library and identify the SSM to the applicable IMS regions. Refer to Chapter 2-9, "Connecting the IMS Attachment Facility," of DB2 Administration Guide for more details.

00E7006B

Explanation: The CICS or IMS Attachment Facility detected that a shutdown was in progress for the DB2 subsystem while processing your request. This might occur during initial connection processing or during subsequent requests, depending on the type of DB2 shutdown.

This abend reason code is issued by the following CSECTs: DSNCEXT1, DSNMERR0

System Action: The connection is not established.

User Response: Before you can continue, you must restart the DB2 subsystem. Contact the operator to restart the subsystem, and then resubmit your transaction.

Operator Response: Restart the DB2 subsystem.

00E70081

Explanation: A DROP or ALTER statement was issued but the object cannot be dropped or altered. The object is referenced by a prepared dynamic SQL statement that is currently stored in the prepared statement cache and is in use by an application.

This reason code is issued by the following CSECT: DSNXIDMH

System Action: The requested operation is not performed.

Programmer Response: The requested operation cannot be performed until there are no applications that reference the object using dynamic SQL. Ensure that other applications have quiesced or performed a commit operation. Then try the request again.

Problem Determination: An SQLCODE -904 is issued. The message tokens for that message report the name and type of the object that was being referenced by another application.

# 00E7009C
# Explanation: An attempt was made to execute a statement that depends on an unavailable catalog object. The catalog object will be available after the catalog is updated to the necessary level.
# System Action: The operation is not allowed.
# Operator Response: Notify the system programmer.
# System Programmer Response: In order to perform the operation, you must update the catalog to the required level.
# To do this, run install job DSNTIJTC. For more information about this job, see Section 2 of DB2 Installation Guide.
# Problem Determination: The requested operation is not performed. SQLCODE -904 and message DSNT501I are issued.
# For more information, refer to "Section 2. SQL Return Codes" on page 17 or to the description of the DSNT501I message in "DSNT... Messages" on page 315.

00E7009E

Explanation: The object is dependent on facilities of a release of DB2 that is newer than the release that you are currently running (fall back).

This abend reason code is issued by the following CSECTs:

DSNXIAIX DSNXITB DSNXIATS DSNXICIX
DSNXICTB DSNXIDIX DSNXIDTB DSNXIDTS

System Action: The operation is not allowed.

Operator Response: Notify the system programmer.

System Programmer Response: In order to perform the operation on the object, you must use the release of DB2 that supports the new facilities.

Problem Determination: The requested operation is not performed. An SQLCODE -904 and/or message DSNT501I is issued. Message DSNT501I describes which object has the release dependency.

00E7009F

Explanation: An error occurred while loading the catalog DBD during start-up processing.

System Action: If message DSNX204I is issued to the console, DB2 is started ACCESS(MAINT). Otherwise, the current START command processing is terminated.

Operator Response: Notify the system programmer.

System Programmer Response: Obtain copies of SYS1.LOGREC and the SVC dump. If message DSNX204I was issued to the console, see the description of that message.

Problem Determination: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Register 2 points to a character string that describes the specific error encountered.

Collect the following diagnostic items listed in Appendix B, "Problem determination on page 1051": 1, 2, 5.

This abend reason code is issued by the following CSECT: DSNXLDBD
Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 2, 5.

**00E700A7**

**Explanation:** LE returned an unexpected return code to DB2.

**System Action:** The application program abends.

**User Response:** Notify the system programmer.

**Operator Response:** Notify the system programmer. Print SYS1.LGREC.

**System Programmer Response:** See problem determination and if you suspect an error in DB2, refer to Section 3 of Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:**

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 2, 5.

**00E70105**

**Explanation:** This is an internal RDS error. One of the SQLWARN fields does not contain a valid value while determining SQLSTATE field value. SQLWARN fields are described in Appendix C of DB2 SQL Reference.

This abend reason code is issued by the following CSECTs: DSNXERD, DSNXEEZ

**System Action:** The application program ABENDs.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** This is a DB2 internal error. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 2, 1, 5.

**00E70106**

**Explanation:** DB2 received a functional request and encountered an internal authorization error. The function cannot be processed.

**System Action:** The function is rejected with this reason code. If the request was SQL, then the SQLCODE is -922.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Please call the IBM Support Center to resolve this problem.

**00E70110**

**Explanation:** The commit failed because the application was not connected to the Current Server.

This abend reason code is issued by the following CSECT: DSNXECW

**System Action:** The reason code or SQLCODE -900 is returned to the application which is in an unconnected state.

**User Response:** A previous failure has left your application in an unconnected state. Notify the system programmer that a system failure occurred during execution of your application. Any changes made in the last unit of work is rolled back. Re-run your application after determining the state of the Current Server database.

**Operator Response:** For Communication failure, refer to DSNL500I message.

**System Programmer Response:** Diagnose the failure that left the user application in an unconnected state. See "Problem Determination" section below.

**Problem Determination:** Refer to the previous SQL error in the application.

**00E70115**

**Explanation:** The unit of work was placed in a state where a rollback operation is required. This can happen when an abend occurs during the execution of a stored procedure, a user defined function (UDF), or a restricted SQL operation was issued from a stored procedure.

This item is issued by the following CSECT: DSNXECW.

**System Action:** In the IMS and CICS environments, all SQL statements are rejected until the rollback occurs. In the other
environments, all SQL statements other than a static ROLLBACK are rejected until a static ROLLBACK is executed.

Programmer Response: Correct the stored procedure or UDF, rebind it and resubmit the calling application.

00E70911
Explanation: The current unit of work was the victim in a deadlock, or experienced a timeout, and had to be rolled back. RC00E70911 is the same as the SQLCODE -911. For more information, refer to the SQL return code.
This abend reason code is issued by the following CSECTs:
DSNXCEXT3, DSNMDR10
System Action: The statement cannot be executed. The application is rolled back to the previous COMMIT.
Operator Response: Notify the system programmer.
If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 5.

00E70913
Explanation: The application was the victim in a deadlock or experienced a timeout. RC00E70913 is the same as the SQLCODE -913. For more information, refer to the SQL return code.
This abend reason code is issued by the following CSECT:
DSNXEEZ
System Action: The statement cannot be executed.
Operator Response: Notify the system programmer.
System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 5.

00E72008
Explanation: The relational data system (RDS) sort subcomponent has determined that there is not enough storage to continue the sort process.
This abend reason code is issued by the following CSECTs:
DSNXSOREI DSNXSTS DSNXSTSE DSNXSTSG
System Action: The application program abends.
Operator Response: Notify the system programmer.
System Programmer Response: The CT is formatted and a return code with a value of 8 is returned from the sort subcomponent to indicate a resource was unavailable. Check the SYSOUT message file for any errors detected by the sort subcomponent.

00E72018
Explanation: The relational data system (RDS) sort subcomponent has detected an internal inconsistency.
This abend reason code is issued by the following CSECTs:

00E72058
Explanation: The relational data system (RDS) sort subcomponent has detected an internal inconsistency.
This abend reason code is issued by the following CSECTs:
DSNXSMR DSNXSMRE DSNXSMRG
System Action: A record is written to SYS1.LOGREC and an SVC dump is requested.
Operator Response: Notify the system programmer. Provide a print of the SVC dump to the system programmer.
System Programmer Response: This is a DB2 internal error. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Problem Determination: The sort subcomponent has detected an internal inconsistency. The precise problem can be determined only by analyzing the abending module at the point of failure. The register contents at the time of abend are set as follows:
• R2 points to the SRTCOMM.
• R3 is an unique decimal code that identifies the error location and error type.
Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2, 5.

00E72048
Explanation: The relational data system (RDS) sort subcomponent has detected an internal inconsistency.
This abend reason code is issued by the following CSECT:
DSNXSORI
System Action: A record is written to SYS1.LOGREC and an SVC dump is requested. The application program abends.
Operator Response: Notify the system programmer. Provide a print of the SVC dump to the system programmer.
System Programmer Response: This is a DB2 internal error. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Problem Determination: The sort subcomponent has detected an internal inconsistency. The precise problem can be determined only by analyzing the abending module at the point of failure. The register contents at the time of abend are set as follows:
• R2 points to the SPL.
• R3 is an unique decimal code that identifies the error location and error type.
Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2, 5.
System Programmer Response: This is a DB2 internal error. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The sort subcomponent has detected that the number of unsorted records input to sort did not equal the number of sorted records returned by sort minus the number of records removed from the sort by the evaluation of column functions. The precise problem can be determined only by analyzing the abending module at the point of failure. The register contents at the time of abend are set as follows:

- R2 points to the SRTCOMM.

Collect the following diagnostic items listed in Appendix B.

00E72068

Explanation: The relational data system (RDS) sort subcomponent has detected an internal inconsistency.

This abend reason code is issued by the following CSECTs: DSNXSIN, DSNXSMRG

System Action: A record is written to SYS1.LOGREC and an SVC dump is requested. The application program abends.

Operator Response: Notify the system programmer. Provide a print of the SVC dump to the system programmer.

System Programmer Response: This is a DB2 internal error. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The sort subcomponent has detected an internal inconsistency in the merge process. The precise problem can be determined only by analyzing the abending module at the point of failure. The register contents at the time of abend are set as follows:

- R2 points to the SRTCOMM.

Collect the following diagnostic items listed in Appendix B.

00E72078

Explanation: The relational data system (RDS) sort subcomponent has detected an internal inconsistency.

This abend reason code is issued by the following CSECTs: DSNXSIN, DSNXSMRG

System Action: A record is written to SYS1.LOGREC and an SVC dump is requested. The application program abends.

Operator Response: Notify the system programmer. Provide a print of the SVC dump to the system programmer.

System Programmer Response: This is a DB2 internal error. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The sort subcomponent has detected a sort work file management inconsistency in the merge process. The precise problem can be determined only by analyzing the abending module at the point of failure. The register contents at the time of abend are set as follows:

- R2 points to the SPL.

Collect the following diagnostic items listed in Appendix B.
00E72100
Explanation: DB2 detected an internal inconsistency in sort during parallel query processing.
System Action: A record is written to SYS1.LOGREC and an SVC dump is requested.
Operator Response: Notify the system programmer. Provide a print of the SVC dump to the system programmer.
System Programmer Response: This is a DB2 internal error.
Problem Determination: Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
The precise problem can be determined only by analyzing the abending module at the point of failure. The register contents at the time of abend are set as follows:
- R2 points to the SRTCOMM.
- R3 is an unique decimal code that identifies the error location and error type.
Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 5.
This abend reason code is issued by the following CSECTs: DSNXSMRE DSNXSORI DSNXSPKY DSNXSPNS

00E72200
Explanation: DB2 detected an internal inconsistency in sort during parallel query processing. This is a DB2 internal error.
System Action: A record is written to SYS1.LOGREC and an SVC dump is requested. The application program abends.
Operator Response: Notify the system programmer. Provide a print of the SVC dump to the system programmer.
Problem Determination: Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
The precise problem can be determined only by analyzing the abending module at the point of failure. The register contents at the time of abend are set as follows:
- R2 points to the SPL.
- R3 is an unique decimal code that identifies the error location and error type.
Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 5.
This abend reason code is issued by the following CSECT: DSNXSPRM

00E73001
Explanation: The SQL statement or utility operation could not be executed because the statement needed a level of OS/390 that is not installed.
System Action: The SQL statement is rejected with SQLCODE -20101 and this reason code.
System Programmer Response: Refer to the Program Directory to determine the minimum level of OS/390 that is required for the syntax used in the statement.

00E73002
Explanation: The SQL statement could not be executed because of a resource unavailable condition. The resource is LE/370.
System Action: The SQL statement is rejected with SQLCODE -20101 and this reason code.
System Programmer Response: Refer to the system console for preceding errors. Correct the cause of these errors and restart the DB2 subsystem.

00E73003
Explanation: The SQL statement could not be executed because the statement needed a levelfeature of OS/390 that is not installed. DB2 attempted to load a required LE/370 load module and was unable to do so.
System Action: The SQL statement is rejected with SQLCODE -20101 and this reason code.
System Programmer Response: Refer to the Program Directory to determine the minimum level of OS/390 that is required for the syntax used in the statement.

00E73004
Explanation: The SQL statement could not be executed because of a resource unavailable condition. The resource was an LE token.
System Action: The SQL statement is rejected with SQLCODE -20101 and this reason code.
System Programmer Response: Refer to the system console for preceding errors. Confirm that the zparm keyword LEMAX is greater than zero. If the problem is persistent, consider increasing the number of LE tokens that the DB2 subsystem is allowed to create. See the Installation Guide for more information on LE tokens.

00E73005
Explanation: The SQL statement or utility operation could not be completed because a hardware resource is not available.
System Action: The SQL statement is rejected with SQLCODE -20107 or the utility issues message DSNT500I and terminates.
System Programmer Response: Examine the -20107 or DSNT500I message to identify the type of hardware resource that is not available. Refer to DB2 Program Directory, G110-8182 to determine the minimum level of hardware support that is needed for the syntax used in the statement or utility.

00E79001
Explanation: DB2 received an SQL CALL statement for a stored procedure or an SQL statement containing an invocation of a user-defined function. The statement was not accepted because the routine was stopped. Possible reasons are:
- the STOP PROCEDURE ACTION(REJECT) command was issued for this procedure, or
- the STOP FUNCTION ACTION(REJECT) command was issued for this user-defined function, or
- there was a previous abnormal termination of the routine.
System Action: The statement cannot be executed.

Programmer Response: If the user-written routine was stopped by an abnormal termination, correct the cause of the abnormal termination.

Programmer Response: Use the -START PROCEDURE command to activate the stored procedure.

Programmer Response: Use the -START FUNCTION command to activate the user-defined function.

Problem Determination: This reason code is issued by the following CSECTs: DSNX9CCM, DSNX9GPL.

00E79002

Explanation: DB2 received an SQL CALL statement for a stored procedure or an SQL statement containing an invocation of a user-defined function. The statement was not accepted because the procedure could not be scheduled before the installation-defined time limit expired. This can happen for any of the following reasons:

- The DB2 STOP PROCEDURE(name) or STOP FUNCTION SPECIFIC command was in effect. When this command is in effect, a user-written routine cannot be scheduled until a DB2 START PROCEDURE or START FUNCTION SPECIFIC command is issued.
- The user-written routine could not be assigned to a TCB in the DB2-established stored procedures address space in the required time interval, because all available stored procedure TCBs were in use.
- The DB2-established stored procedures address space dispatching priority is low, resulting in delays when processing stored procedure requests. If the delays become excessive, the TCBs in the stored procedure address space do not become available to process new SQL CALL statements in a timely manner.
- The dispatching priority assigned by WLM to the caller of the user-written routine was low, which resulted in WLM not assigning the request to a TCB in a WLM-established stored procedure address space before the installation-defined time limit expired.
- The WLM application environment is quiesced so WLM will not assign the request to a WLM-established stored procedure address space.
- WLM is being used in compatibility mode, and the needed stored procedure address space has not been started using the MVS START command.

System Action: The statement cannot be executed.

Problem Determination: This reason code is issued by the following CSECTs: DSNX9CAL, DSNX9GPL.

00E79004

Explanation: DB2 received an SQL CALL statement for a stored procedure. The stored procedure could not be accepted, because the DB2-established stored procedures address space is not active.

The DB2-established stored procedures address space is not active for any of the following reasons:

- The DB2 module DSNZPARM specified a blank value for the name of the JCL PROC for the DB2-established stored procedure address space.
- The stored procedures address space was cancelled or intentionally terminated by the system administrator.

System Action: The statement cannot be executed.

Problem Determination: This reason code is issued by the following CSECTs: DSNX9CAL, DSNX9GPL.
00E79006

**Explanation:** DB2 received an SQL CALL statement for a
stored procedure or an SQL statement containing an invoca-
tion of a user-defined function. The statement cannot be
honored, because the user-written routine's load module is not
compatible with Language Environment preinitialization envi-
ronment.

**System Action:** The SQL CALL statement is rejected with
SQLCODE -471 and this reason code.

**Programmer Response:** Ensure the routine is compiled with
a level of the compiler which generates a module that can be
a target of a Language Environment preinitialization CEEPIPI
call. Ensure that the routine is link edited with the Language
Environment runtime library.

Verify that the user-written routine is described correctly in
SYSIBM.SYSROUTINES as a main or sub program. This
failure can occur if the procedure options for the stored proce-
dure indicate it is a sub program and the specification in the
catalog indicates it is a main program.

Message DSNX962I will also be displayed on the MVS system
console. This message indicates the specific Language Envi-
ronment preinitialization service that failed and the failing return
code.

For the required levels of the compilers, see DB2 Application
Programming and SQL Guide.

00E79007

**Explanation:** An attempt to call a DB2 stored procedure
failed, because the host language specified in the LANGUAGE
clause of the user-defined function or procedure did not match
the language reported by LE/370.

**System Action:** The attempt to call the stored procedure
fails, and the procedure is marked STOP-REJ.

**System Programmer Response:** Use the ALTER FUNC-
TION or ALTER PROCEDURE statement to correct the LAN-
GUAGE attribute specified for the user-defined function or
procedure. Once this is corrected, issue the START FUNC-
TION SPECIFIC or START PROCEDURE command to allow
the user-defined function or procedure to be called.

00E79008

**Explanation:** The SQL CALL statement could not be proc-
essed. The SECURITY attribute of the user-defined function or
procedure requested that a specific security environment be
established. An error occurred while attempting to establish
this security environment.

**System Action:** The SQL CALL statement is rejected with
SQLCODE -471 and this reason code.

**System Programmer Response:** Additional error messages
might have been generated by the external security product to
describe the error. Use the ALTER FUNCTION or ALTER
PROCEDURE statement to modify the SECURITY attribute
specified for the user-defined function or procedure.

00E7900B

**Explanation:** The SQL CALL statement could not be proc-
essed. DB2 determined that the user-defined function or proce-
dure was to be run in a specific WLM-established address
space, but the necessary WLM services are not available.

**System Action:** The SQL CALL statement is rejected with
SQLCODE -471 and this reason code.

**Programmer Response:** Use the ALTER FUNCTION or
ALTER PROCEDURE statement to modify the WLM ENVI-
RONMENT attribute specified for the user-defined function or
procedure, or specify the NO WLM ENVIRONMENT clause.

**System Programmer Response:** Issue the START Func-
TION SPECIFIC or START PROCEDURE command to allow
the altered user-defined function or procedure to be called.

00E7900C

**Explanation:** SQL CALL statement or user-defined function
invocation could not be processed. The WLM application envi-
ronment name specified for the user-written routine is not
defined or is currently not available for DB2 use in the active
WLM policy.

**System Action:** The SQL statement is rejected with
SQLCODE -471 and this reason code.

**Programmer Response:** Use the -ALTER PROCEDURE or
-ALTER FUNCTION command to update the WLM ENVIRON-
MENT to specify an application environment that is defined
and active in the active WLM policy, or update the WLM policy
to contain a valid application environment name.

- If the WLM policy definition is updated, use the MVS WLM
  VARY command to activate this new definition.

- If the WLM application environment is quiesced, use the MVS
  WLM VARY APPLENV=applenv, RESUME command to acti-
  vate the application environment.

00E7900E

**Explanation:** SQL CALL statement or user-defined function
invocation could not be processed. The routine was invoked
by another stored procedure or user-defined function which
had the opposite characteristic of being WLM-managed or
DB2-managed from this routine. Nesting is not allowed
between DB2-managed stored procedures and WLM-managed
stored procedures or user-defined functions.

**System Action:** The SQL statement is rejected with
SQLCODE -471 and this reason code.

**Programmer Response:** Use the ALTER PROCEDURE
command to change the attribute to NO WLM ENVIRON-
MENT, or alter the invoking routine to not invoke this one.

00E7900F

**Explanation:** Insufficient storage space available for the
parameter list to a user-defined function or stored procedure.
This error is caused by a single parameter or a group of
parameters requiring more contiguous storage than DB2 can
obtain.

**System Action:** The SQL statement is rejected with
SQLCODE -904 and this reason code.
Programmer Response: Validate the length of each parameter.
If LOBs are being used, consider using LOB locators instead.

**00E79100**

Explanation: An internal DB2 error was encountered while processing a stored procedure request.
This abend reason code is issued by the following CSECTs:

DSNX9SER  DSNX9STP  DSNX9TEX  DSNX9WTO.

System Action: The task encountering the error is abended.
User Response: Notify the system programmer.
System Programmer Response: This is a DB2 internal error.
Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 4.
Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**00E79106**

Explanation: DB2 could not process an SQL CALL statement for a REXX stored procedure. There were errors associated in setting up an environment to run a REXX stored procedure.
See the system console for the associated DSNX993I message.
System Action: The SQL statement fails with this reason code and SQL code -471.
Programmer Response: Use the information provided in the DSNX993I message, and the TSO and REXX messages in ddname SYSTSPRT for diagnosis. You can find TSO and REXX message explanations in OS/390 TSO/E Messages and OS/390 TSO/E REXX Reference.

**00E79200**

Explanation: A Control Center 390 stored procedure encountered an unexpected abnormal termination or error condition.
System Action: The Control Center 390 stored procedure terminates, and returns a failing return code to the calling application. The Control Center 390 stored procedure retries from the abnormal termination, so DB2 will not detect that the stored procedure has abnormally terminated. The count of abnormal terminations maintained by DB2 will not be incremented for this abnormal termination.
Operator Response: Notify the system programmer.
System Programmer Response: If you suspect an error in Control Center 390, contact IBM support.
Problem Determination: The error is recorded on SYS1.LOGREC, and an SVC dump is requested.
X'E8......' Codes

00E80001

Explanation: A required parameter was not passed via the MVS MGCR service which started the DB2 address space. The parameter must be the address of SCOM for the system services address space or the address on an ASCE for the database services address space or the distributed data facility address space.

System Action: The DB2 subsystem is terminated.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem Determination: Register 9 contains the address of a 4-byte field that contains the pending function request value.

Collect the following diagnostic items listed in Appendix B "Problem determination" on page 1051 2, 3, 5.

00E80004

Explanation: An error occurred when a POST was issued from a resource manager address space to the system services address space in order to indicate that the DB2 subsystem startup function completed successfully.

System Action: The services address space might be abnormally terminating.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem Determination: The system services address space is abnormally terminating.

Collect the following diagnostic items listed in Appendix B "Problem determination" on page 1051 2, 3, 5.

00E80005

Explanation: An error occurred when a POST was issued from a resource manager address space to the system services address space in order to indicate that the allied authorization function completed successfully.

System Action: The system services address space is abnormally terminating.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem Determination: Probable cause is that the system services address space is abnormally terminating.

Collect the following diagnostic items listed in Appendix B "Problem determination" on page 1051 2, 3, 5.

00E80006

Explanation: An unsupported pending function request was detected during processing in the system services address space.

System Action: The DB2 subsystem is terminated.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

**Problem Determination:** Register 9 contains the address of a 4-byte field that contains the pending function request value.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 2, 3, 5.

---

**00E8000E**

**Explanation:** MVS was unable to establish an ESTAE for the DB2 address space control task.

This abend reason code is issued by the following CSECT: DSNYASCP

**System Action:** The DB2 subsystem is terminated.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

**Problem Determination:** Register 9 contains the address of a 4-byte field that contains the ESTAE macro return code.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 2, 3, 5.

---

**00E8000F**

**Explanation:** The expected latent parameter passed by the MVS MGCR macro service is invalid. The cause was probably an attempt to start DB2 by some means other than the command -START DB2.

This abend reason code is issued by the following CSECT: DSNYASCP

**System Action:** The DB2 subsystem is terminated.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

**Problem Determination:** Register 9 contains the address of a 4-byte field that contains the parameter value.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 2, 3, 5, 8.

---

**00E80011**

**Explanation:** MVS was unable to make the address space nonswappable.

This abend reason code is issued by the following CSECT: DSNYASTR

**System Action:** The DB2 subsystem is terminated.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

---

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 2, 3, 5, 8.

---

**00E80012**

**Explanation:** An error occurred when a POST was issued from the system services address space to a resource manager address space in order to indicate the results of the MGCR invocation.

This abend reason code is issued by the following CSECT: DSNYASTR

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

**Problem Determination:** The resource manager address space might be abnormally terminating.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 2, 3, 5, 8.

---

**00E80013**

**Explanation:** MVS was unable to create a resource manager address space.

This abend reason code is issued by the following CSECT: DSNYASTR

**System Action:** The DB2 subsystem is terminated.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

**Problem Determination:** The resource manager address space that MVS was unable to create has inhibited the starting of new address spaces.

Probable cause is that the MVS auxiliary storage management has inhibited the starting of new address spaces because of a shortage of real storage.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051 2, 3, 5.

---

**00E8001F**

**Explanation:** An unsupported function request was detected by the DB2 address space start function.

This abend reason code is issued by the following CSECT: DSNYASTR

**System Action:** The DB2 subsystem is terminated.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 2, 3, 5.

00E8002F

**Explanation:** An unsupported function request was detected by the DB2 address space stop function.

This abend reason code is issued by the following CSECT: DSNYASTP

**System Action:** The DB2 subsystem is terminated.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 2, 3, 5.

00E80031

**Explanation:** An unsupported input parameter was detected for allied address space initialization.

This abend reason code is issued by the following CSECT: DSNYALLI

**System Action:** The caller's task is abended.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 2, 3, 5.

00E80032

**Explanation:** An unsupported input parameter was detected for allied address space termination.

This abend reason code is issued by the following CSECT: DSNYALLI

**System Action:** The caller's task is abended.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 2, 3, 5.
**00E8003E**

**Explanation:** MVS was unable to establish an ESTAE in an address space about to be initialized as a DB2 allied address space.

This abend reason code is issued by the following CSECT: DSNYALLI

**System Action:** The caller's task is abended.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

**Problem Determination:** Refer to Appendix A, "CICS Transaction Abend/Dump Code" on page 1049 for information on X'04F' and X'04E' abend completion codes.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 2, 3, 5.

---

**00E8003F**

**Explanation:** An unsupported function request was detected by the allied address space control function.

This abend reason code is issued by the following CSECT: DSNYALLI

**System Action:** The caller’s task is abended.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

**Problem Determination:** Register 9 contains the address of a 4-byte field that contains the function value.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 2, 3, 5.

---

**00E80041**

**Explanation:** An error occurred when a POST was issued from an allied address space to the system services address space in order to indicate a pending allied authorization request.

This abend reason code is issued by the following CSECT: DSNYAUTH

**System Action:** The DB2 subsystem is terminated.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

**Problem Determination:** The system services address space might be abnormally terminating.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 2, 3, 5.

---

**00E80042**

**Explanation:** An error occurred when a POST was issued from the system services address space to a resource manager address space in order to indicate a pending allied authorization request.

This abend reason code is issued by the following CSECT: DSNYAUTH

**System Action:** The DB2 subsystem is terminated.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

**Problem Determination:** The resource manager address space might be abnormally terminating.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 2, 3, 5.

---

**00E80051**

**Explanation:** An error was detected in the command that was used to start the DB2 subsystem. There are two conditions that can cause this error. If the -START DB2 command is in error, this abend results.

Secondly, if the DB2 subsystem is not running (had never been started, or had been stopped), any DB2 command that is entered is interpreted as being a -START DB2 command. In this second case, the subsystem starts just long enough to discover that the command actually is not a -START DB2 command and then issues the abend.

This abend reason code is issued by the following CSECT: DSNYSTRT

**System Action:** The DB2 subsystem is terminated.

**Operator Response:** Reenter the command if it was entered in error; otherwise advise the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

This error does not cause a SYS1.LOGREC record to be written or an SVC dump to be requested. A diagnostic tool (for example, MVS SLIP) is required to get subcomponent diagnostic information.

**Problem Determination:** Register 9 contains the address of a 12-byte field that contains the following diagnostic information: bytes 1 through 4, the address of the buffer that contains the command used to start DB2; bytes 5 through 8, the general command processor return code; bytes 9 through 12, the IPC command processor return code, or ‘FFFFFFFF’ if bytes 5 through 8 contain a positive value.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 2, 3, 5.

---

**00E80052**

**Explanation:** A resource manager provided notification of failure during facility startup notification processing.

This abend reason code is issued by the following CSECT: DSNYSTRT

**System Action:** The DB2 subsystem is terminated.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

**Problem Determination:** Register 9 contains the address of a 4-byte field that contains the RMID of the resource manager that requested DB2 subsystem termination.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 2, 3, 5.

---

**00E80053**

**Explanation:** A resource manager provided notification of failure during release work notification processing.

This abend reason code is issued by the following CSECT: DSNYSTRT

**System Action:** The DB2 subsystem is terminated.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

**Problem Determination:** Register 9 contains the address of a 4-byte field that contains the RMID of the resource manager that requested DB2 subsystem termination.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 2, 3, 5.

---

**00E80054**

**Explanation:** The recovery manager (RM) subcomponent provided notification of an error during restart recovery processing.

This abend reason code is issued by the following CSECT: DSNYSTRT

**System Action:** The DB2 subsystem is terminated.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

**Problem Determination:** Register 9 contains the address of a 4-byte field that contains the return code from the recovery manager subcomponent.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 2, 3, 5.

---

**00E80055**

**Explanation:** The recovery manager (RM) subcomponent detected an error during DB2 checkpoint processing.

This abend reason code is issued by the following CSECT: DSNYSTRT

**System Action:** The DB2 subsystem is terminated.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

**Problem Determination:** Register 9 contains the address of a 4-byte field that contains the return code from the recovery manager subcomponent.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 2, 3, 5.

---

**00E80056**

**Explanation:** During startup, DB2 was unable to access DSN6FAC in ZPARMS and therefore was unable to determine whether the distributed data facility was to be loaded.

This abend reason code is issued by the following CSECT: DSNYSTRT

**System Action:** The DB2 subsystem is terminated.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Assemble DSN6FAC and re-link-edit the DSNZPARM load module.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2, 5, 9.
00E80057

**Explanation:** An error occurred while trying to start a DB2 resource manager address space. A possible cause of this problem would be a JCL error in a start up procedure. Note that the error is probably not in the address space that issued this abend.

This abend reason code is issued by the following CSECT: DSNYSTRRT

**System Action:** The DB2 subsystem is terminated.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 5, 3.

00E80058

**Explanation:** The version of DB2 that you are attempting to start is not compatible with this version of MVS. This version of DB2 requires MVS/ESA.

**System Action:** The DB2 subsystem is not started.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Change the DB2 start-up procedures to use a version of DB2 that is compatible with the version of MVS that you are using.

**Problem Determination:** Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 3, 5.

This abend reason code is issued by following CSECT: DSNYASCP

00E8005F

**Explanation:** An unsupported function request was detected by the DB2 subsystem startup control function.

This abend reason code is issued by the following CSECT: DSNYSTRRT

**System Action:** The DB2 subsystem is terminated.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** Register 9 contains the address of a 4-byte field that contains the function request value.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 2, 3, 5.

00E80061

**Explanation:** A resource manager initialization table (RMIT) that has an invalid format was detected.

This abend reason code is issued by the following CSECT: DSNYSDLB

**System Action:** The DB2 subsystem is terminated.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

**Problem Determination:** Register 9 contains the address of an 8-byte field that contains the name of the load module in which the invalid resource manager initialization table (RMIT) format exists.

Probable cause is that the load module does not contain an RMIT or, the linkage editor entry control statement does not specify the RMIT as the module entry point.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 2, 3, 5.

00E8006F

**Explanation:** An unsupported function request was detected by the definitional control block management function.

This abend reason code is issued by the following CSECT: DSNYSDLB

**System Action:** The DB2 subsystem is terminated.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

**Problem Determination:** Register 9 contains the address of a 4-byte field that contains the function request value.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 2, 3, 5.

00E8007F

**Explanation:** An unsupported function request was detected by the application program call parameter management function.

This abend reason code is issued by the following CSECT: DSNYSPCB

**System Action:** The DB2 subsystem is terminated.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

**Problem Determination:** Register 9 contains the address of a 4-byte field that contains the function request value.
Collect the following diagnostic items listed in Appendix B on page 1051.

00E80081
Explanation: An invalid initialization load module list (ILML) was detected.
This abend reason code is issued by the following CSECT: DSNYSIRM
System Action: The DB2 subsystem is terminated.
Operator Response: Notify the system programmer.
System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).
Problem Determination: The module might not contain an initialization load module list or the linkage editor entry control statement might not specify the initialization load module list as the module entry point.
Register 9 contains the address of an 8-byte field that contains the name of the module that holds the invalid initialization load module list.
Collect the following diagnostic items listed in Appendix B on page 1051.

00E80084
Explanation: A resource manager provided notification of failure during subsystem startup notification processing.
This abend reason code is issued by the following CSECT: DSNYSIRM
System Action: The DB2 subsystem is terminated.
Operator Response: Verify that you entered the -START DB2 command using the correct DSNZPARM initialization parameter module. If it was not, reenter the command with the correct DSNZPARM module. Otherwise, notify the system programmer.
System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).
Problem Determination: Register 9 contains the address of a 4-byte field that contains the RMID of the resource manager that requested DB2 subsystem termination.
Collect the following diagnostic items listed in Appendix B on page 1051.

00E8008F
Explanation: An unsupported function request was detected by the resource manager initialization function.
This abend reason code is issued by the following CSECT: DSNYSIRM
System Action: The DB2 subsystem is terminated.
Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).
Problem Determination: Register 9 contains the address of a 4-byte field that contains the function request value.
Collect the following diagnostic items listed in Appendix B on page 1051.

00E80091
Explanation: An error occurred when a POST was issued from the control address space to a resource manager address space in order to indicate that DB2 shutdown is to be initiated for that address space.
This abend reason code is issued by the following CSECT: DSNYSTOP
System Action: The DB2 subsystem is terminated.
Operator Response: Notify the system programmer.
System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).
Problem Determination: The resource manager address space might be abnormally terminating.
Collect the following diagnostic items listed in Appendix B on page 1051.

00E8009F
Explanation: An unsupported function request was detected by the DB2 subsystem shutdown control function.
This abend reason code is issued by the following CSECT: DSNYSTOP
System Action: The DB2 subsystem is terminated.
Operator Response: Notify the system programmer.
System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).
Problem Determination: Register 9 contains the address of a 4-byte field that contains the function request value.
Collect the following diagnostic items listed in Appendix B on page 1051.

00E800AF
Explanation: An unsupported function request was detected by the resource manager termination function.
This abend reason code is issued by the following CSECT: DSNYSIRM
System Action: The DB2 subsystem is terminated.
Operator Response: Notify the system programmer.
00E800B1
Explanation: A service task could not be created during processing of the -STOP DB2 command.
This abend reason code is issued by the following CSECT: DSNYSCMD
System Action: The DB2 subsystem is terminated.
Operator Response: Notify the system programmer.
System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem
The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).
Problem Determination: Register 9 contains the address of a 4-byte field that contains the function request value.
Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051 2, 3, 5.

00E800C1
Explanation: MVS was unable to establish an ESTAE for the stop-work notification function.
This abend reason code is issued by the following CSECT: DSNYSTPW
System Action: The DB2 subsystem is terminated.
Operator Response: Notify the system programmer.
System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).
Problem Determination: Register 9 contains the address of a 4-byte field that contains the return code from the create-service task function of the agent services manager (ASM) subcomponent.
Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051 2, 3, 5.

00E800CE
Explanation: MVS was unable to establish an ESTAE for the stop-work notification function.
This abend reason code is issued by the following CSECT: DSNYSTPW
System Action: The DB2 subsystem is terminated.
Operator Response: Notify the system programmer.
System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).
Problem Determination: Register 9 contains the address of a 4-byte field that contains the ESTAE macro return code.
Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051 2, 3, 5.

00E800D1
Explanation: A resource manager provided notification of failure during local memory-create notification processing.
This abend reason code is issued by the following CSECT: DSNYAGCS
System Action: The DB2 subsystem is terminated.
Operator Response: Notify the system programmer.
System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).
Problem Determination: Register 9 contains the address of a 4-byte field that contains the function request value.
Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 2, 3, 5.

00E80100

Explanation: The DB2 subsystem was abended because the DB2 address space control task ESTAE was entered. This reason code is issued for all abend completion codes, except for the X'04F' abend completion code.

This abend reason code is issued by the following CSECT: DSNYECTE

System Action: Termination of the DB2 subsystem is initiated.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

The DB2 subsystem is unable to determine the cause of the error.

Problem Determination: The subcomponent that caused the error is unknown. Refer to Appendix A, "CICS Transaction Abend/Dump Code" on page 1049 for information on X'04E' and X'04E' abend completion codes.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 2, 3, 5, 9, 16, 19.

00E8011D

Explanation: An unrecovered resource (for example, a latch) was detected for a must-complete function.

This abend reason code is issued by the following CSECT: DSNYEATE

System Action: Termination of DB2 subsystem is initiated.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem Determination: Refer to Appendix A, "CICS Transaction Abend/Dump Code" on page 1049 for information on X'04F' and X'04E' abend completion codes.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 2, 3, 5.

00E8011E

Explanation: The allied address space task primary ESTAE detected that MVS was unable to establish the secondary ESTAE.

This abend reason code is issued by the following CSECT: DSNYEATE

System Action: Abnormal termination of allied address space is continued.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem Determination: Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 2, 3, 5.

00E8011F

Explanation: The allied address space task primary ESTAE was entered without a subsystem diagnostic work area (SDWA) provided by MVS RTM.

This abend reason code is issued by the following CSECT: DSNYEATE

System Action: Abnormal termination of the allied address space is continued.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem Determination: Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 2, 3, 5.

00E8012D

Explanation: The allied address space task secondary ESTAE detected an unrecovered resource (for example, a latch) for a 'must complete' function.

This abend reason code is issued by the following CSECT: DSNYEATE2

System Action: Abnormal termination of DB2 subsystem is initiated.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem Determination: Refer to Appendix A, "CICS Transaction Abend/Dump Code" on page 1049 for information on X'04F' and X'04E' abend completion codes.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 2, 3, 5.

00E8012F

Explanation: The allied address space task secondary ESTAE was entered without a subsystem diagnostic work area (SDWA) provided by MVS.

This abend reason code is issued by the following CSECT: DSNYEATE2

System Action: Continue with the abnormal termination of the allied address space.

Operator Response: Notify the system programmer.
System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 2, 3, 5.

00E80130

Explanation: The FRR that protects the -START/-STOP DB2 command processor function was entered while a valid -STOP DB2 command was being processed.

This abend reason code is issued by the following CSECT: DSNYESCF

System Action: The DB2 subsystem is terminated.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem Determination: Refer to Appendix A, “CICS Transaction Abend/Dump Code” on page 1049 for information on X'04E9' and X'04E1' abend completion codes.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 2, 3, 5.

00E80140

Explanation: The ESTAE that protects the stop work notification function was entered.

This abend reason code is issued by the following CSECT: DSNYESWE

System Action: The DB2 subsystem is terminated.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem Determination: Refer to Appendix A, “CICS Transaction Abend/Dump Code” on page 1049 for information on X'04F7' and X'04E1' abend completion codes.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 2, 3, 5.

00E80150

Explanation: An initialization entry point list having an invalid format was detected.

This abend reason code is issued by the following CSECT: DSNYEMCL

System Action: The DB2 subsystem is terminated.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem Determination: Register 9 contains the address of a 4-byte field that contains the function request value.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 2, 3, 5.
**00E80160**

**Explanation:** During DB2 startup processing, the Initialization Procedures subcomponent detected a load module with an invalid AMODE or RMODE attribute. The abend is preceded by message DSNY006I or by DSNY007I.

This abend reason code is issued by the following CSECTs:

- DSNYASCP
- DSNYASTR
- DSYSIRM
- DSNYSTRT

**System Action:** Subsystem startup is terminated.

**Operator Response:** See message DSNY006I or message DSNY007I.

**System Programmer Response:** The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA). If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

See message DSNY006I or message DSNY007I.

**Problem Determination:** See message DSNY006I or message DSNY007I.

---

**00E80170**

**Explanation:** You requested a facility that was not loaded or started at the time DB2 started. Whether or not to load or start a facility is contained in the DSN6FAC member in ZPARMS.

This reason code is returned to the calling CSECTs by DSNYNFAC along with a return code of 8.

This is not an error in DSNYNFAC. If an error exists, it might be in the calling CSECT or in the DSN6FAC member in ZPARMS.

**System Action:** This is determined by the caller of DSNYNFAC.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If it can be determined that DSN6FAC is in error, assemble DSN6FAC with corrections and re-link-edit the DSNZPARM load module.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 5, 9.

---

**00E80161**

**Explanation:** During DB2 subsystem startup processing, the Initialization Procedures subcomponent detected a load module that was not at the same version of DB2 as the subsystem being started.

This abend reason code is issued by the following CSECT: DSNYASCP

**System Action:** Subsystem startup is terminated.

**Operator Response:** See message DSNY010I.

**System Programmer Response:** The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA). If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

See message DSNY010I.

**Problem Determination:** See message DSNY010I.
X'E9......' Codes

00E9001

Explanation: This reason code is issued when a DB2 directory cannot be opened. This is probably a DB2 subsystem error.

This abend reason code is issued by the module identified in the SYS1.LOGREC entry for this abend code.

System Action: A record is written to SYS1.LOGREC, and an SVC dump is requested.

Operator Response: Notify the system programmer.

System Programmer Response: Obtain a print of SYS1.LOGREC and the SVC dump.

Problem Determination: This abend results when any one of a number of DB2 internal directories cannot be opened. One customer-useable directory can also cause this abend if it cannot be opened. This is the DSNZPARM directory that is established at installation.

This directory may have a name different from that specified at installation, because the customer has the option of changing the name during installation. Ensure that the DSNZPARM directory (or its equivalent) is available to be opened.

If the DSNZPARM directory (or its equivalent) is available, the problem is a DB2 subsystem problem. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

This abend is intercepted by an FRR or ESTAE for the sub-component or module that issued the DSNZOPEN request. The module containing the abended request is identified in the SYS1.LOGREC entry. This information may be useful in communicating with IBM about the problem.

Collect the following diagnostic items listed in Appendix B.

00E90203

Explanation: An error was found in the descriptor control information for a DB2 directory. This is probably a DB2 subsystem error.

This abend reason code is issued by the following CSECT: DSNZTGET

System Action: A record is written to SYS1.LOGREC, and an SVC dump is requested.

Operator Response: Notify the system programmer.

System Programmer Response: Obtain a print of SYS1.LOGREC and the SVC dump.

Problem Determination: This abend results when incorrect control information is found for any one of a number of DB2 internal directories. One customer-useable directory can also cause this abend. This is the DSNZPARM directory that is established during installation.

This directory may have a name different from that specified at installation, because the customer has the option of changing the name during installation. Ensure that the DSNZPARM directory (or its equivalent) is available.

If the DSNZPARM directory (or its equivalent) is available, the problem is a DB2 subsystem problem. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B.

00E90201

Explanation: An incorrect parameter was encountered. This reason code is issued by module DSNZTGET in response to a DSNZGDE request. This is a DB2 subsystem error.

This abend reason code is issued by the following CSECT: DSNZTGET

System Action: A record is written to SYS1.LOGREC, and an SVC dump is requested.

Operator Response: Notify the system programmer.

System Programmer Response: Obtain a print of SYS1.LOGREC and the SVC dump.

Problem Determination: Locate the caller's save area by examining register 13 in the SYS1.LOGREC register save area. Registers 0 and 1 in the caller's save area identify the incorrect parameter(s).

Collect the following diagnostic items listed in Appendix B.

00E90202

Explanation: An error was found in the directory control information for a DB2 directory. This is probably a DB2 subsystem error.

This abend reason code is issued by the following CSECT: DSNZTGET

System Action: A record is written to SYS1.LOGREC, and an SVC dump is requested.

Operator Response: Notify the system programmer.

System Programmer Response: Obtain a print of SYS1.LOGREC and the SVC dump.

Problem Determination: This abend results when incorrect control information is found for any one of a number of DB2 directories. One customer-useable directory can also cause this abend. This is the DSNZPARM directory that is established during installation.

This directory may have a name different from that specified at installation, because the customer has the option of changing the name during installation. Ensure that the DSNZPARM directory (or its equivalent) is available.

If the DSNZPARM directory (or its equivalent) is available, the problem is a DB2 subsystem problem. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B.
00E90301

Explanation: This reason code is issued when a DB2 directory cannot be closed. This is probably a DB2 subsystem error.

This abend reason code is issued by the module identified in the SYS1.LOGREC entry for this abend code.

System Action: A record is written to SYS1.LOGREC, and an SVC dump is requested.

Operator Response: Notify the system programmer.

System Programmer Response: Obtain a print of SYS1.LOGREC and the SVC dump.

Problem Determination: This abend results when any one of a number of DB2 internal directories cannot be closed. One customer-usable directory can also cause this abend if it cannot be closed. This is the DSNZPARM directory that is established at installation.

This directory may have a name different from that specified at installation, because you have the option of changing the name during installation. Ensure that the DSNZPARM directory (or its equivalent) is available to be opened.

If the DSNZPARM directory (or its equivalent) is available, the problem is a DB2 subsystem problem. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

This abend is intercepted by an FRR or ESTAE for the subcomponent or module that issued the DSNZOPEN request. The module containing the abended request is identified in the SYS1.LOGREC entry. This information may be useful in communicating with IBM about the problem.

Collect the following diagnostic items listed in Appendix B, Problem determination on page 1051: 1, 3, 5, 8, 9, 32.
X'F1......' Codes

The DSN1LOGP service aid can abend with user abend code X'099'. You can find the corresponding abend reason code in register 15 at the time of error.

00F10100

Explanation: An internal error has been detected in the DSN1LOGP service aid.

Operator Response: Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

00F10101

Explanation: The stand-alone log read function returned an invalid RBA. See the explanation for message DSN1211E.

Operator Response: If you determine that the data set is a log data set and it is not damaged, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
X'F3......' Codes

Many of the following abend reason codes are returned in register 15 at the time of an X '0Cx' system abend and not as the reason code for an X '04E' abend. This is indicated in the descriptions that follow.

00F30001
Explanation: This reason code may be returned to subsystem-type recovery coordinators when they connect to DB2 or during processing of indoubt threads to inform the coordinator that further recovery coordination actions are required.
This reason code is not normally visible to users or operators, but may appear in DB2 traces.
This reason code is issued by the following CSECTs:
DSN3ID30 DSN3RI0 DSN3RIS0
System Action: Processing continues.

00F30002
Explanation: The requested DB2 subsystem, as specified by the subsystem name, is not active. The option to notify the requester, either via an ECB post or a SEND/MODIFY MVS command, is accepted.
This reason code is issued by the following CSECT: DSN3CL0X
System Action: The request to notify the caller when the subsystem is active is queued for processing during subsystem startup.
User Response: Retry the connection request after DB2 has been started.

00F30003
Explanation: An abend has occurred during an attempt to access or modify the caller-provided function request block (FRB) while executing in the caller’s PSW key.
This abend reason code is issued by the following CSECTs:
DSNAPRH DSNAPRHX DSN3CLU0X DSN3ID00
System Action: The request is not processed.
User Response: A dump should be taken for problem analysis.
System Programmer Response: See Problem Determination.
Problem Determination: This reason code is placed in register 15 during any access to an attachment-provided parameter list. A subsequent X '0Cx' abend indicates a parameter addressability problem.
This abend is probably the result of a logic error in the attachment facility. For call attachment users, the abend may have been caused by a bad parameter address passed to call attachment.
Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 5, 49.

00F30004
Explanation: An abend has occurred during an attempt to access the attachment-provided parameter list while executing in the caller’s PSW key.
This abend reason code is issued by the following CSECTs:
DSNAPRH DSNAPRHX DSN3CLU0X DSN3CT30 DSN3ID00 DSN3ID30 DSN3ID60 DSN3ITP0 DSN3RI0 DSN3RIS0
System Action: The request is not processed.
User Response: A dump should be taken for problem analysis.
System Programmer Response: See Problem Determination.
Problem Determination: This reason code is placed in register 15 during any access to an attachment-provided parameter list. A subsequent X '0Cx' abend indicates a parameter addressability problem.
This abend is probably the result of a logic error in the attachment facility. For call attachment users, the abend may have been caused by a bad parameter address passed to call attachment.
Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 5, 49.

00F30005
Explanation: An error was detected during processing of a request to establish or delete a ‘termination ECB’. Either a parameter value was incorrect or an abend occurred while accessing the attachment-provided parameter list.
This abend reason code is issued by the following CSECT: DSN3EXT0
System Action: The request is not processed.
User Response: A dump should be taken for problem analysis.
System Programmer Response: See Problem Determination.
Problem Determination: For the nonabend case, either the ECB address was zero or the Request Code was not ‘Establish’ or ‘Delete’. If the reason code is in register 15 on an abend, either the parameter list or a parameter value was not addressable in the caller’s PSW key.
The error may be the result of an internal error in the attachment facility. Call attachment users should check that the supplied ECB address is not zero and that it is addressable in their PSW key.
Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 5, 49.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 5, 49.
00F30006

**Explanation:** A failure occurred while processing the 'Subsystem Name' parameter during connection processing. In the abend case, connection processing failed when accessing the 'Subsystem Name' in the caller's PSW key. In the nonabend case, MVS was unable to locate a DB2 subsystem with the specified name.

This reason code is issued by the following CSECT: DSN3ID00

**System Action:** The request is not processed.

**User Response:** A dump should be taken in your recovery routine for abend analysis. If the named subsystem could not be found, verify that the correct subsystem name was specified. Call attachment users should note that the Translate function cannot be invoked for this reason code.

**System Programmer Response:** See Problem Determination.

**Problem Determination:** If the named subsystem could not be found, scan the MVS system log to verify that it was initialized during MVS IPL processing.

If this reason code was specified in register 15 on an abend, check that the subsystem name value is addressable in the caller's PSW key.

Collect the following diagnostic items listed in Appendix B, [Problem determination on page 1051](#), 5, 49.

00F30007

**Explanation:** A failure occurred while processing the 'Connection Type' parameter during connection processing. Either the 'Connection Type' value was invalid or an abend occurred accessing the parameter using the caller's PSW key.

This reason code is issued by the following CSECTs: DSN3CL0X, DSN3ID30.

**System Action:** The request is not processed.

**User Response:** A dump should be taken for problem analysis.

**System Programmer Response:** See Problem Determination.

**Problem Determination:** For the abend case, this reason code is placed in register 15 to identify which parameter was not addressable in the caller's PSW key. The failure may be due to a logic error in the attachment facility. Call attachment users should verify that the Startup ECB address is nonzero and that the ECB word is addressable in their PSW key.

Collect the following diagnostic items listed in Appendix B, [Problem determination on page 1051](#), 5, 49.

00F30008

**Explanation:** A failure occurred while processing the 'Notify Message/Startup ECB' parameter during connection processing. An abend occurs while accessing the parameter or while verifying that the ECB word was addressable in the caller's PSW key. In the nonabend case, either the parameter had a zero length or the supplied ECB address was zero.

This reason code is issued by the following CSECT: DSN3CL0X

**System Action:** The request is not processed.

**User Response:** A dump should be taken for problem analysis.

**System Programmer Response:** See Problem Determination.

**Problem Determination:** For the abend case, this reason code is placed in register 15 to identify which parameter was not addressable in the caller's PSW key. The failure may be due to a logic error in the attachment facility. Call attachment users should verify that the Startup ECB address is nonzero and that the ECB word is addressable in their PSW key.

Collect the following diagnostic items listed in Appendix B, [Problem determination on page 1051](#), 5, 49.

00F30009

**Explanation:** A request was received to establish a termination ECB, but a termination ECB had already been established for the connected task.

This reason code is issued by the following CSECT: DSN3EXT0

**System Action:** The request is not processed.

**User Response:** A dump should be taken for problem analysis.

**System Programmer Response:** Obtain all dumps taken by the attachment facility or invoking application.

**Problem Determination:** This failure is probably the result of a logic error in the attachment facility.

00F30010

**Explanation:** A request was received to delete a termination ECB, but a termination ECB has not been established for the connected task.

This reason code is issued by the following CSECT: DSN3EXT0

**System Action:** The request is not processed.

**User Response:** A dump should be taken for problem analysis.

**System Programmer Response:** Obtain all dumps taken by the attachment facility or invoking application.

**Problem Determination:** This failure is probably the result of a logic error in the attachment facility.

00F30011

**Explanation:** A connection or other work request was received, but the designated DB2 subsystem is not active. If the request was to connect to the subsystem, and the Notify Message/Startup ECB was supplied, it was not accepted.

# In some instances, this code may be received if the application program issued an RRSAF IDENTIFY function request and RRS/MVS was not available.

**System Action:** The request is not processed.

**User Response:** If the failure occurred on a connection request and a Notify Message/Startup ECB was provided, a dump should be taken for problem analysis. Reconnect to DB2 when the subsystem is active again.

# If RRS/MVS was not available for an RRSAF IDENTIFY request, ensure RRS/MVS is active and retry the request

**System Programmer Response:** Obtain all dumps taken by the attachment facility or invoking application.
**Problem Determination:** The Notify Message or Startup ECB could not be accepted for one of two reasons.

- Storage for a buffer could not be obtained, or
- the length of the Message/ECB parameter was zero.

In the latter case, the attachment facility is probably in error. If insufficient storage was available for a buffer, the size of the CSA in 24-bit storage should be increased.

In some instances, the failure was reported because the application required an RRSAF IDENTITY request and RRS/MVS was not active. Additional checking is needed when RRS/MVS is involved.

---

**00F30012**

**Explanation:** The requested DB2 subsystem, as specified by the subsystem name, is not active. The option to notify the requester, either via an ECB post or a SEND/MODIFY MVS command, is accepted, but overlays a previous Notify Message/Startup ECB request.

This reason code is issued by the following CSECT: DSN3CL0X

**System Action:** The request to notify the caller when the subsystem is active is queued for processing during subsystem startup.

**User Response:** Retry the connection request after DB2 has been started.

---

**00F30013**

**Explanation:** The requester is not authorized to connect to the DB2 subsystem. This condition might indicate an attempted security violation.

This reason code is issued by the following CSECT: DSN3AUCN

**System Action:** The connection request is denied.

**User Response:** Verify that you have specified the correct RACF authorization ID. If necessary, request authorization to access the DB2 subsystem from your security administrator.

**System Programmer Response:** Examine the console/SYSLOG output for RACF messages issued when a request is denied. Refer the user to your security administrator if the user should be granted authorization to a DB2 subsystem. Refer to Section 3 (Volume 1) of DB2 Administration Guide for examples of how to authorize users to specific DB2 subsystems.

**Problem Determination:** During TCB connection processing, Subsystem Support invokes the RACROUTE service (causing a RACF RACHECK) to verify the authorization ID associated with the requester. If the RACF return code indicates the requester is not authorized to connect to this DB2 subsystem, the connection request is terminated with this reason code.

---

**00F30014**

**Explanation:** The requester of a Subsystem Support function (for example, ABORT) for a connection is not in the same PSW key as when the connection was created.

This abend reason code is issued by the following CSECTs:

**System Action:** The requester's task is abended with code X'04E'.

**User Response:** A dump should be taken for problem analysis.

**System Programmer Response:** See Problem Determination.

**Problem Determination:** This failure may be the result of a logic error in the attachment facility or an intentional attempt to violate DB2 connection protocols. The error should be evaluated in the same way as a system X'OC2' abend, an attempt by a nonprivileged program to perform privileged operations.

Collect the following diagnostic items listed in Appendix B.

---

**00F30015**

**Explanation:** The attachment facility specified an invalid combination of values of FRBRALE and FRBQUAL. No Program Request Handler exists to service the call.

This reason code is issued by the following CSECT: DSNAPRHX

**System Action:** The request is not processed.

**User Response:** A dump should be taken for problem analysis.

**System Programmer Response:** Obtain all dumps taken by the attachment facility and requesting application.

**Problem Determination:** Register 1 contains a pointer to the FRB at the entry to DSNAPRHX. The FRBRALE and FRBQUAL values in the caller's FRB should be examined to determine which one is in error. Not all combinations of valid FRBRALE and FRBQUAL values are supported. Each RALE is supported differently.

---

**00F30016**

**Explanation:** The attachment facility specified an invalid FRBRALE value. The value is outside the limits of those supported for the requesting connection. This can occur in many cases, one of which is when an SQL call is requested with a blank plan name by the requester.

This reason code is issued by the following CSECT: DSNAPRHX

**System Action:** The request is not processed.

**User Response:** A dump should be taken for problem analysis.

**System Programmer Response:** Obtain all dumps taken by the attachment facility and requesting application.

**Problem Determination:** Register 1 contains a pointer to the FRB at the entry to DSNAPRHX. FRBRALE contains the invalid value that was passed. The value passed is not consistent with the resources allocated to the connected application.

If the plan name contains blanks, an SQL call is invalid. The requester should respecify the plan name and issue the request again.
00F30017

**Explanation:** The attachment facility specified an invalid FRBQUAL value. The value is outside the limits of those supported for the requesting connection.

This reason code is issued by the following CSECT: DSNAPRX

**System Action:** The request is not processed.

**User Response:** A dump should be taken for problem analysis.

**System Programmer Response:** Obtain all dumps taken by the attachment facility and requesting application.

**Problem Determination:** Register 1 contains a pointer to the FRB at the entry to DSNAPRX. FRBQUAL contains the invalid value that was passed. The value passed is not consistent with the resources allocated to the connected application.

00F30018

**Explanation:** The requester's TCB is not connected to this instance of the DB2 subsystem. The TCB may have been connected to a previous instance.

This reason code is issued by the following CSECT: DSNAPRX

**System Action:** The request is not processed.

**User Response:** A dump should be taken for problem analysis.

**System Programmer Response:** Request a new connection to DB2.

**Problem Determination:** This error can occur for one of the following reasons:
# The DB2 subsystem has terminated and the connected application issues a DB2 work request without reestablishing the connection after the subsystem is restarted.
# The connection has been terminated by a CANCEL THREAD command.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051.

00F30019

**Explanation:** The requester's primary ASID (PASID) is not equal to the home ASID (PSAAOLD).

This reason code is issued by the following CSECT: DSNAPRX

**System Action:** The request is not processed.

**User Response:** You may want to take a dump for problem analysis. The request may be retried, but first ensure the CPU is not in cross-memory mode.

**System Programmer Response:** See Problem Determination.

**Problem Determination:** No requester of a DB2 attachment facility may be in cross-memory mode. That is, PASID must equal HASID, which must equal SASID.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051.

00F30020

**Explanation:** An error was detected while processing the 'Commit Option' on a SSAM termination request. Either the value of the 'Commit Option' parameter was not valid or an abend occurred when accessing the parameter.

This abend reason code is issued by the following CSECTs:

DSN3DI00  DSN3SI00  DSN3TR00

**System Action:** The request is not processed.

**User Response:** A dump should be taken for problem analysis.

**System Programmer Response:** See Problem Determination.

**Problem Determination:** For the abend case, this reason code is placed in register 15 to identify which parameter was not addressable in the caller's PSW key. The failure may be the result of a logic error in the attachment facility. Call Attachment users should note that only 'SYNC' and 'ABRT' are valid terminate options.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051.

00F30021

**Explanation:** An attachment facility issued a Subsystem Support request, but provided too few or too many parameters.

This abend reason code is issued by the following CSECTs:

DSN3AB00  DSN3CM00  DSN3CT00  DSN3CTB0  DSN3PR00  DSN3SY00

**System Action:** The request is not processed.

**User Response:** A dump should be taken for problem analysis.

**System Programmer Response:** Obtain all dumps taken by the attachment facility or by the requesting application.

**Problem Determination:** This failure is probably the result of a logic error in the attachment facility.

Upon entry to each of the CSECTs listed above, register 1 contains the address of the Function Request Block (FRB). FRBPCNT contains the number of passed parameters and FRBPARAM points to a list of parameter addresses. The required number of parameters is unique to the calling protocol for each CSECT.

00F30022

**Explanation:** An error was detected while processing the 'Connection Name' for a connection request. Either the value of the 'Connection Name' parameter was not valid or an abend occurred when accessing the parameter.

This abend reason code is issued by the following CSECT:

DSN3ID30

**System Action:** The request is not processed.

**User Response:** A dump should be taken for problem analysis.

**System Programmer Response:** See Problem Determination.
Problem Determination: For the abend case, this reason code is placed in register 15 to identify which parameter was not addressable in the caller's PSW key. A 'Connection Name' is invalid if it is not a printable string (e.g. binary zeros). The failure is probably the result of a logic error in the attachment facility.

Collect the following diagnostic items listed in Appendix B: "Problem determination" on page 1051 5, 49.

00F30023
Explanation: This reason code may be returned during connection processing if the connection name is already in use by another allied address space, but the connection type is different.

This reason code is not normally visible to users or operators, but may appear in DB2 traces. The ally attempting to connect to DB2 should have produced diagnostic information relating to the connection failure.

This reason code is issued by the following CSECT: DSN3ID30

System Action: The connection request is rejected.

System Programmer Response: Collect the diagnostics produced by the allied address space which could not connect to DB2.

Problem Determination: Follow the instructions indicated by the diagnostics to assure that a different connection name will be used on future attempts to connect to DB2.

00F30024
Explanation: The 'connection name' or 'connection type' does not match the name or type established by another connected task in the address space.

This reason code is issued by the following CSECT: DSN3ID30

System Action: The connection request is denied.

User Response: A dump should be taken for problem analysis.

System Programmer Response: See Problem Determination.

Problem Determination: All tasks within an address space connecting to the same DB2 subsystem must connect with the same connection name and type. Tasks within TSO and batch address spaces using the 'BATCH' connection type may specify unequal connection names. The failure is probably the result of a logic error in the attachment facility.

Collect the following diagnostic items listed in Appendix B: "Problem determination" on page 1051 1, 49.

00F30025
Explanation: A request to establish a DB2 termination ECB has completed successfully; however, DB2 is stopping. The new termination ECB might not be posted.

This reason code is issued by the following CSECT: DSN3EXIT0

System Action: Control is returned to the attachment facility.

User Response: Since DB2 is stopping, you should attempt to terminate your connection. Next, issue a connect request and provide a Startup ECB. When the Startup ECB is posted, issue the connect request again to re-establish your connection to the restarted DB2.

00F30026
Explanation: The attachment facility specified an invalid FRBFVLE value. The value is outside the limits of those supported for the requesting connection.

This reason code is issued by the following CSECT: DSNAPRHX

System Action: The request is not processed.

User Response: A dump should be taken for problem analysis.

System Programmer Response: Obtain all dumps taken by the attachment facility and requesting application.

Problem Determination: Register 1 contains a pointer to the FRB at the entry to DSNAPRHX. FRBFVLE contains the invalid value that was passed. The value passed must not be zero and it must be consistent with the resource requested by FRBRALE.

00F30027
Explanation: An error occurred while processing the 'Weighting Factor' parameter. This parameter was provided by the attachment facility on a request to allocate a DB2 plan to the application.

Either an abend occurred accessing the 'Weighting Factor' or the value of the parameter is out of range.

This abend reason code is issued by the following CSECT: DSN3CT30

System Action: The request is not processed.

User Response: A dump should be taken for problem analysis.

System Programmer Response: See Problem Determination.

Problem Determination: For the abend case, this reason code is placed in register 15 to identify which parameter was not addressable in the caller's PSW key. The value of the 'Weighting Factor' must be a positive number between zero and 255. The failure is probably the result of a logic error in the attachment facility.

Collect the following diagnostic items listed in Appendix B: "Problem determination" on page 1051 5, 49.

00F30028
Explanation: This reason code is returned when previous invocations of DB2 have set the thread into a state such that the only acceptable request that can be made for the thread is ABORT. This could occur, for example, if the ally has issued "Prepare to Commit" and DB2 returned a "No" vote on the call. In this situation, the only acceptable request for the ally to make is ABORT.

This reason code is not normally visible to users or operators, but may appear in DB2 traces. The ally may have produced diagnostics to report this condition, or it may handle this condition internally without requiring outside intervention.

This reason code is issued by the following CSECTs: DSN3TR00, DSN3CHM00
System Action:  The current allied request is rejected. The state of the thread is unchanged.

System Programmer Response:  Collect any diagnostics produced by the allied address space.

Problem Determination:  Follow the instructions indicated by the diagnostics, if any.

---

**00F30029**

Explanation:  This reason code is returned when a COMMIT request is received in an improper context. Either a PREPARE is required before the COMMIT request, or the connection type does not allow a COMMIT request.

This reason code is not normally visible to users or operators, but may appear in DB2 traces.

This reason code is issued by the following CSECTs: DSN3CM00, DSN3TR00

System Action:  The current allied request is rejected. The state of the thread is unchanged.

---

**00F30030**

Explanation:  An abend has occurred during an attempt to access the caller-provided 'INDOUBT RESOLUTION' parameter while executing in the PSW key. This is probably the result of a logic error in the requesting program.

This abend reason code is issued by the following CSECTs: DSN3RI0A0, DSN3RI0M0

System Action:  The request is not processed.

User Response:  A dump should be taken for problem analysis.

Problem Determination:  This reason code is placed in register 15 during any access to caller-provided information. When any abend occurs this register indicates which parameter caused the error.

Collect the following diagnostic items listed in Appendix B, Problem determination on page 1051: 1, 5.

---

**00F30031**

Explanation:  This reason code is returned when a DEALLOCATE request is received from a CICS or IMS thread, but PREPARE has already completed for the thread and either COMMIT or ABORT are the only acceptable requests.

This reason code is not normally visible to users or operators, but may appear in DB2 traces.

This reason code is issued by the following CSECT: DSN3TR00

System Action:  The current allied request is rejected. The state of the thread is unchanged. The ally issuing the DEALLOCATE request may have produced diagnostics related to this error.

System Programmer Response:  Collect the diagnostics produced by the allied address space, if any.

Problem Determination:  Follow the instructions indicated by the diagnostics.

---

**00F30032**

Explanation:  An error occurred while processing the 'Indoubt Resolution' parameter. This parameter was provided by the attachment facility on a request to allocate a DB2 plan to the application.

Either an abend occurred accessing the 'Indoubt Resolution' or the value of the parameter is incorrect for this connection type.

This abend reason code is issued by the following CSECT: DSN3CT30

System Action:  The request is not processed.

User Response:  A dump should be taken for problem analysis.

System Programmer Response:  See Problem Determination.

Problem Determination:  For the abend case, this reason code is placed in register 15 to identify which parameter was not addressable in the caller’s PSW key. For TSO, batch, and Call Attachment connections, the value of the 'Indoubt Resolution' parameter must be 'NO'. The failure is probably the result of a logic error in the attachment facility.

Collect the following diagnostic items listed in Appendix B, Problem determination on page 1051: 5, 49.

---

**00F30033**

Explanation:  An abend has occurred during an attempt to access the 'Plan Name' parameter while executing in the caller’s PSW key.

This abend reason code is issued by the following CSECT: DSN3CT30

System Action:  The request is not processed.

User Response:  A dump should be taken for problem analysis.

System Programmer Response:  See Problem Determination.

Problem Determination:  This reason code is placed in register 15 to identify which parameter was not addressable in the caller’s PSW key. The failure may be the result of a logic error in either the attachment facility or the requesting application.

Collect the following diagnostic items listed in Appendix B, Problem determination on page 1051: 5, 49.

---

**00F30034**

Explanation:  The authorization ID associated with this connection is not authorized to use the specified plan name or the specified plan name does not exist.

This reason code is issued by the following CSECTs: DSN3CT30, DSN3SI30

System Action:  The request to allocate a plan to the authorization ID is denied.

User Response:  Verify that the correct plan name was specified. If this plan exists, then request execution authority to the plan from either the owner of the plan or from another person given authority to grant execution authority to the plan.
00F30035

**Explanation:** An abend has occurred during an attempt to access the caller-provided authorization ID while executing in the PSW key of the caller. This is probably the result of a logic error in the requesting program.

This abend reason code is issued by the following CSECT: DSN3SI30

**System Action:** The request is not processed.

**User Response:** A dump should be taken for problem analysis.

**Problem Determination:** This reason code is placed in register 15 during any access to caller-provided information. When any abend occurs this register indicates which parameter caused the error.

Collect the following diagnostic items listed in Appendix B.

00F30036

**Explanation:** This reason code may be returned during connection processing for a coordinator thread if a coordinator for that connection name already exists. This may be a case of two IMS or CICS systems using the same connection name.

This reason code is not normally visible to users or operators, but may appear in DB2 traces. The ally attempting to connect to DB2 should have produced diagnostic information relating to the connection failure.

This reason code is issued by the following CSECT: DSN3ID30

**System Action:** The connection request is rejected.

**System Programmer Response:** Collect the diagnostics produced by the allied address space which could not connect to DB2.

**Problem Determination:** Follow the instructions indicated by the diagnostics to ensure that a different connection name will be used on future attempts to connect to DB2.

00F30037

**Explanation:** This reason code may be returned during connection processing for a CICS or IMS dependent (noncoordinator) thread if a coordinator for that connection name does not already exist. This may be an internal error in CICS, IMS, or the attachment package.

This reason code is not normally visible to users or operators, but may appear in DB2 traces. The ally attempting to connect to DB2 should have produced diagnostic information relating to the connection failure.

This reason code is issued by the following CSECT: DSN3ID30

**System Action:** The connection request is rejected.

**System Programmer Response:** Collect the diagnostics produced by the allied address space which could not connect to DB2.

**Problem Determination:** Follow the instructions indicated by the diagnostics.

00F30038

**Explanation:** An abend has occurred during an attempt to access the ‘Correlation ID’ parameter while executing in the caller’s PSW key.

This abend reason code is issued by the following CSECTs: DSN3CT30, DSN3SI30

**System Action:** The request is not processed.

**User Response:** A dump should be taken for problem analysis.

**System Programmer Response:** See Problem Determination.

**Problem Determination:** This reason code is placed in register 15 to identify which parameter was not addressable in the caller’s PSW key. The failure is probably the result of a logic error in the attachment facility.

Collect the following diagnostic items listed in Appendix B.

00F30039

**Explanation:** This reason code may be returned on a PREPARE request if Network ID (NID) is specified, but NID was previously specified on the CREATE THREAD request. NID cannot be specified on both requests. This may be an internal error in CICS, IMS, or the attachment package.

This reason code is not normally visible to users or operators, but may appear in DB2 traces. The ally issuing the PREPARE to DB2 should have produced diagnostic information relating to the connection failure.

This reason code is issued by the following CSECT: DSN3PR00

**System Action:** The PREPARE request is rejected.

**System Programmer Response:** Collect the diagnostics produced by the allied address space which had the failing request.

**Problem Determination:** Follow the instructions indicated by the diagnostics.

00F30040

**Explanation:** The allocation of the plan to the connection failed. Either a resource is unavailable or the requested resource (plan) is not known to DB2.

This reason code is issued by the following CSECT: DSN3CT30

**System Action:** Information on the failing resource name, object type, and a Database Services reason code, that help to explain the allocation failure, are returned to the attachment facility.

**User Response:** Unknown plans must be bound before they can be accessed.

Call Attachment users may invoke the TRANSLATE function to move the information returned to the attachment facility into the error message field SQLERRMT in the SQLCA.

**System Programmer Response:** Refer to message DSNT500I for identification of unavailable resources and diagnostics to be collected. Refer to Table 3 in Appendix B for an explanation of resource type codes.
Problem Determination: See response suggestions above.

00F30042

Explanation: An abend has occurred during an attempt to access the caller-provided recovery coordinator option while executing in the PSW key of the caller. This is probably the result of a logic error in the requesting program.

This abend reason code is issued by the following CSECT: DSN3ID30

System Action: The request is not processed.

User Response: A dump should be taken for problem analysis.

Problem Determination: This reason code is placed in register 15 during any access to caller-provided information. When any abend occurs this register indicates which parameter caused the error.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 5.

00F30043

Explanation: A terminate request was received with the 'Dealocate' option, but a unit of recovery is still outstanding for the connection. Either 'SYNC' or 'ABRT' must be requested before resources can be deallocated.

This reason code is issued by the following CSECT: DSN3TR00

System Action: The termination request is not processed.

User Response: A dump should be taken for problem analysis.

System Programmer Response: Obtain all dumps taken by the attachment facility or requesting application.

Problem Determination: This failure is probably the result of a logic error in the attachment facility or a DB2 connection management error. This reason code is placed in register 0 and the return code is placed in register 15.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 5, 22, 23, 24, 25, 26.

00F30044

Explanation: This reason code is returned when a DEALLOCATE request is received with uncommitted work outstanding. Either the PREPARE, COMMIT sequence or an ABORT request is required.

This reason code is not normally visible to users or operators, but may appear in DB2 traces.

This reason code is issued by the following CSECT: DSN3TR00

System Action: The current allied request is rejected. The state of the thread is unchanged. The ally issuing the DEALLOCATE request may have produced diagnostics related to this error.

Problem Determination: Follow the instructions indicated by the diagnostics.

00F30045

Explanation: An error has occurred while attempting to locate the Unit of Recovery associated with a DISPLAY, COMMIT, or ABRT request. This is probably the result of a logic error in the requesting program.

This reason code is issued by the following CSECTs: DSN3RIA0, DSN3RIM0

System Action: The request is not processed.

User Response: A dump should be taken for problem analysis.

System Programmer Response: Obtain all dumps taken by the attachment facility or requesting application.

Problem Determination: This failure is probably the result of a logic error in the attachment facility.

00F30046

Explanation: A terminate request was received with the 'Commit' option, but this option is not supported for this connection type. Only the 'SYNC' or 'ABRT' options are valid for TSO, batch, and Call Attach connections.

This reason code is issued by the following CSECT: DSN3TR00

System Action: The termination request is not processed.

User Response: A dump should be taken for problem analysis.

System Programmer Response: Obtain all dumps taken by the attachment facility or requesting application.

Problem Determination: This failure is probably the result of a logic error in the attachment facility.

00F30047

Explanation: This reason code is returned when a RECOVER INDOUBT-ABORT request is received from a CICS or IMS recovery coordinator, but the thread is already in the process of COMMITing.

This reason code is not normally visible to users or operators, but may appear in DB2 traces.

This reason code is issued by the following CSECT: DSN3RIA0

System Action: The current allied request is rejected. The state of the thread is unchanged. The ally issuing the RECOVER INDOUBT-ABORT request may have produced diagnostics related to this error.

System Programmer Response: Collect the diagnostics produced by the allied address space, if any.

Problem Determination: Follow the instructions indicated by the diagnostics.
00F30048

Explanation: An abend has occurred during an attempt to access the attachment-provided 'Network ID' while executing in the caller's PSW key.

This abend reason code is issued by the following CSECTs:
- DSN3CT30
- DSN3PR00

System Action: The request is not processed.

User Response: A dump should be taken for problem analysis.

System Programmer Response: See Problem Determination.

Problem Determination: This reason code is placed in register 15 to identify which parameter was not addressable in the caller's PSW key. The failure is probably the result of a logic error in the attachment facility.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 5, 49.

00F30049

Explanation: A request was received to connect the requester's TCB to a DB2 subsystem, but the TCB is already connected.

This reason code is issued by the following CSECT:
- DSN3ID30

System Action: The connection request is rejected.

User Response: A dump should be taken for problem analysis.

System Programmer Response: Obtain all dumps taken by the attachment facility or requesting application.

Problem Determination: The failure is probably the result of a logic error in the attachment facility.

00F30050

Explanation: A DB2 request has been received after a failure during a previous request and cleanup of the previous request did not complete. This can happen if DB2 recovery was bypassed on a previous request. This bypass occurs if the application has an enabled unlocked task (EUT) FRR active and requested a retry back to the application mainline code.

This reason code is issued by the following CSECT:
- DSNAPRHX

System Action: The request is not processed. DB2 will terminate the connection when the TCB terminates.

User Response: You must terminate your task. Do not attempt further DB2 requests. Do not request terminating the connection. You should request a dump for problem analysis.

System Programmer Response: See Problem Determination.

Problem Determination: The diagnostic data should be examined for prior failures while processing a request for this connection. Users of the call attachment facility cannot retry from an EUT FRR routine if an error occurs during DB2 processing.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 5, 49.

00F30051

Explanation: This reason code is returned when a RECOVER INDOUBT request is received from a CICS or IMS recovery coordinator, but the thread is still processing in DB2 code other than EOT. The request cannot be processed at this time but may be successful if issued again later.

This reason code is not normally visible to users or operators, but may appear in DB2 traces.

This reason code is issued by the following CSECT:
- DSN3RIA0

System Action: The current allied request is rejected. The state of the thread is unchanged. The ally issuing the RECOVER INDOUBT request may have produced diagnostics related to this error.

System Programmer Response: Collect the diagnostics produced by the allied address space, if any.

Problem Determination: Follow the instructions indicated by the diagnostics.

00F30052

Explanation: The caller's connection with DB2 has been terminated, because the caller's recovery coordinator has already terminated.

This abend reason code is issued by the following CSECT:
- DSNAPRHX

System Action: The request has been processed by terminating the agent.

User Response: Your application program may identify to DB2 when its recovery coordinator has identified again.

Problem Determination: Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 5.

00F30053

Explanation: An error occurred while processing the 'Current Level' parameter. This parameter was provided by the attachment facility on a termination request.

Either an abend occurred accessing the 'Current Level' or the value of the parameter is invalid.

This abend reason code is issued by the following CSECTs:
- DSN3CT80
- DSN3ID80
- DSN3S80

System Action: The request is not processed.

User Response: A dump should be taken for problem analysis.

System Programmer Response: See Problem Determination.

Problem Determination: For the abend case, this reason code is placed in register 15 to identify which parameter was not addressable in the caller's PSW key. The value of the 'Current Level' parameter must be zero or a number representing the connection's authority level. The failure is probably the result of a logic error in the attachment facility.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 5, 49.
00F30054

Explanation: The value of the ‘Current Level’ parameter does not match the current authority level of the connection. This parameter was provided by the attachment facility on a termination request.

This reason code is issued by the following CSECTs:
DSN3CT80 DSN3ID80 DSN3SI80

System Action: The request is not processed.

User Response: A dump should be taken for problem analysis.

System Programmer Response: Collect all dumps taken by the attachment facility or requesting application.

Problem Determination: The failure is probably the result of a logic error in the attachment facility.

00F30055

Explanation: The maximum number of concurrent identify level agents has been exceeded.

This abend code is issued by the following CSECT: DSN3ID30

System Action: The connection request is not processed.

User Response: Attempt connection to DB2 at a later time.

System Programmer Response: Ensure that the DB2 system parameters controlling the maximum number of concurrent identities are correct. These system parameters are Max Users, Max TSO connect, and Max Batch connect on installation panel DSNTIPE.

00F30056

Explanation: An IDENTIFY request for connection to DB2 was rejected. DB2 had been started in restricted access mode. Only authorization IDs authorized to perform maintenance functions are permitted access to DB2.

This reason code is issued by the following CSECT: DSN3AUCN

System Action: The connection request is not processed.

User Response: Retry the connection request after DB2 has been restarted in full access mode.

00F30057

Explanation: An invalid application-supplied address was encountered while accessing the application-provided data.

This abend reason code is issued by the following CSECTs: DSN3ET03, DSNAPRX.

System Action: The application program is abended with code X'04E' and this reason code.

System Programmer Response: Obtain the dump printout from the application programmer. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The register contents at the time of abend are as follows:

- R2 A decimal code identifying the bad data:
  1. FRB address is invalid.
  2. FRBPARM contains an invalid RDIIN address.
  18. RDICODEP contains an invalid SQLCA address.

- R3 The invalid application data area address.

- R4 The address of the RDIIN.

- R5 The virtual storage key of the data.

- R8 The address of the FRB in the application address space.

Collect the following diagnostic item listed in Appendix B, “Problem determination” on page 1051.

00F30058

Explanation: Access to DB2 has been denied by the site’s authorization exit.

This reason code is issued by the following CSECTs: DSN3AUCN, DSN3AUSI

System Action: The request is not processed.

User Response: Contact your security administrator and request authority to access this DB2 subsystem.

System Programmer Response: No action is necessary unless the request denial was in error. If it was, the authorization exit should be tested to determine the cause of the error.

00F30059

Explanation: The return code from the authorization exit was not valid. Field EXPLARC must be set by the authorization exit to either 0 or 12.

This abend reason code is issued by the following CSECTs: DSN3AUCN, DSN3AUSI

System Action: The request is not processed.

System Programmer Response: Diagnostics obtained for the failure must be analyzed and the exit corrected.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

00F30060

Explanation: Upon return from an authorization exit, the returned value of the SQL ID was not equal to either the returned primary or one of the returned secondary authorization IDs.

This abend reason code is issued by the following CSECTs: DSN3AUCN, DSN3AUSI

System Action: The request is not processed.

System Programmer Response: Diagnostics obtained for the failure must be analyzed and the exit corrected.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.
00F30061

**Explanation:** An abend occurred while referencing the SIGNON request's secondary authorization ID parameter provided by the attachment facility.

This abend reason code is issued by the following CSECT: DSN3S130

**System Action:** SIGNON processing is terminated.

**System Programmer Response:** Analyze the diagnostic data to determine which attachment module may have been in error. If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** This reason code is placed in register 15 to identify which parameter was not addressable with the caller's PSW key. The failure is probably the result of an error in the attachment facility.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 2, 5.

---

00F30062

**Explanation:** Upon return from the SIGNON authorization exit, the returned value of the primary authorization ID is null. The first character is less than or equal to X'40'.

This abend reason code is issued by the following CSECT: DSN3AUSI

**System Action:** The request is not processed.

**System Programmer Response:** Diagnostics obtained for the failure must be analyzed and the exit corrected.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 2, 5.

---

00F30063

**Explanation:** The DB2 attachment facility for IMS, CICS, or RRSASF provided a secondary authorization ID value, but no primary authorization ID value. This is a violation of the SIGNON protocol.

This abend reason code is issued by the following CSECT: DSN3S130

**System Action:** The SIGNON request is terminated with a return code of 12 and this reason code.

**System Programmer Response:** Notify the system programmer.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 2, 5.

---

00F30064

**Explanation:** The DB2 attachment facility for IMS, CICS, or RRSASF did not provide a value for the primary authorization ID, and the current primary authorization ID is also null. This is a violation of the SIGNON protocol. A user's connection must have an associated primary authorization ID.

This abend reason code is issued by the following CSECT: DSN3S130

**System Action:** The SIGNON request is terminated with a return code of 12 and this reason code.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 22, 23, 24, 25, 26, 49.

This is probably an error in the attachment facility.

---

00F30065

**Explanation:** An error occurred in determining the commit state of the thread.

This abend reason code is issued by the following CSECTs:

- DSN3PR00
- DSN3CM00
- DSN3AB00

**System Action:** The caller is abended in DSN3PR00 and DSN3CM00. In DSN3AB00 a dump is taken and an abort is attempted.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** An SVC dump and associated SYS1.LOGREC entries are produced. These can be used to locate the areas for examination, especially the RAL in the dump.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 2, 5.

---

00F30066

**Explanation:** An abend occurred during an attempt to access the caller-provided ACEE address field while executing in the PSW key of the caller. This is probably the result of a logic error in the requesting program.

This abend reason code is issued by the following CSECT: DSN3S130

**System Action:** The sign-on request is not processed.

**User Response:** You may retry from your recovery routine (ESTAE) and continue execution with the same level of capability you had before the request that abended.

**Problem Determination:** The reason code is placed in register 15 prior to any access to caller-provided information.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 2, 5.
00F30067

Explanation: The caller holds a DB2 latch. This is a violation of the Authorization Services request protocol. The caller cannot hold a DB2 latch when requesting connection or sign-on services.

This abend reason code is issued by the following CSECTs: DSN3AUCN, DSN3AUSI

System Action: The connection or sign-on request is not processed.

User Response: A dump should be taken for problem analysis.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: A requester of connection or sign-on cannot hold a DB2 latch.

Collect the following diagnostic items, described in Appendix B, Problem determination on page 1051. Determine who the requester was.

00F30068

Explanation: The CCB is being freed. This Authorization Service request specifies the address of a CCB that has previously been requested to be freed.

This abend reason code is issued by the following CSECTs: DSN3AUCN, DSN3AUSI

System Action: The connection or sign-on request is not processed.

User Response: A dump should be taken for program analysis.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Authorization Service requests must be serialized. Once a request to free a given CCB is made, no subsequent Authorization Service request can be made referencing the same CCB.

Collect the following diagnostic items described in Appendix B, Problem determination on page 1051.

00F30069

Explanation: The exit environment is incorrect. Either the exit environment was freed after connection processing or an error occurred acquiring storage for a CCB or during connection processing.

This abend reason code is issued by the following CSECT: DSN3AUSI

System Action: The sign-on request is not processed.

User Response: A dump should be taken for problem analysis.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Collect the following diagnostic items, described in Appendix B, Problem determination on page 1051.

00F30070

Explanation: Functional recovery for the connection or sign-on processing could not be established. The executing module could not establish its ESTAE. This can occur if the current address space has insufficient storage. This may lead to an abnormal termination of the DB2 subsystem.

This abend reason code is issued by the following CSECTs: DSN3AUCN, DSN3AUSI

System Action: The connection or sign-on request is not processed. The caller is abended with code X’04E’ and this reason code.

User Response: A dump should be taken for problem analysis.

Operator Response: Notify the system programmer and restart DB2 if necessary.

System Programmer Response: Examine the usage and free areas in the LSQA portion of the current address space private area. If necessary, have the size of the private areas expanded.

Problem Determination: The caller should produce a SYS1.LOGREC entry and an SVC dump, so that the system programmer can examine the LSQA area.

Collect the following diagnostic items, described in Appendix B, Problem determination on page 1051.

00F30071

Explanation: A logic error has occurred. An Authorization Service request has been made that references the same CCB as a currently processing request. These requests must be serialized.

This reason code is issued by the following CSECTs: DSN3AUCN, DSN3AUSI

System Action: The connection or sign-on request is not processed.

User Response: Notify the system programmer. A dump should be taken for problem analysis.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: Authorization service requests must be serialized. Once an authorization service request is made referencing a given CCB, no subsequent authorization service requests can be made referencing the same CCB until the first request completes.

Collect the following diagnostic items, described in Appendix B, Problem determination on page 1051.

00F30072

Explanation: The requester's authorization ID or password could not be verified. This condition may indicate a security violation.

This reason code is issued by the following CSECT: DSN3AUCN

System Action: The connection request is not processed.

User Response: Verify that you have specified the correct RACF authorization ID and password. If necessary, request
authorization to the DB2 subsystem from your security administrator.

**System Programmer Response:** Examine the console/SYSLOG output for RACF messages issued when a request is denied. Refer the user to your security administrator if the user should be granted access to a DB2 subsystem. If this error occurred during a remote connection request, examine the communications database to determine the security controls in effect for a remote connection request. Refer to Section 3 (Volume 1) of *DB2 Administration Guide* for examples of how to authorize users for specific DB2 subsystems.

**Problem Determination:** During remote connection processing, Authorization Services invokes the RACROUTE service using the RACF RACINIT form to verify the authorization ID and password, if supplied, associated with the requester. If the RACF return code indicates the authorization ID or password could not be verified, the connection request is terminated with this reason code.

---

**00F30073**

**Explanation:** The parameter flag settings on the Authorization Service request contradict each other. One flag is set to request the build of the exit environment. The other flag is set to request the release of the exit environment. These flags are mutually exclusive.

This abend reason code is issued by the following CSECT: DSN3AUCN

**System Action:** The connection request is not processed. The caller is abended with code X'04E' and this reason code.

**User Response:** A dump should be taken for problem analysis.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** Only one of these flags can be set on when requesting connection processing.

Collect the following diagnostic items, described in *Appendix B: "Problem determination" on page 1051* 3, 4, 49.

---

**00F30074**

**Explanation:** There is a problem in the execution environment. Connection or sign-on was requested from an SRB-mode execution unit, but the authorization services service task that would normally be switched to does not exist.

This abend reason code is issued by the following CSECTs: DSN3AUCN, DSN3AUSI

**System Action:** The connection or sign-on request is not processed.

**User Response:** Notify the system programmer. A dump should be taken for problem analysis.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** Determine why the authorization services service task was not created.

Collect the following diagnostic items, described in *Appendix B: "Problem determination" on page 1051* 3, 4, 49.

---

**00F30075**

**Explanation:** RACROUTE returned an error when a request was made to RACROUTE to free an ACEE.

This reason code is issued by the following CSECTs: DSN3AUCN, DSN3AUSI

**System Action:** The connection or sign-on request is not processed.

**User Response:** A dump should be taken for problem analysis.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** Collect the following diagnostic items, described in *Appendix B: "Problem determination" on page 1051* 1, 2, 3, 49.

---

**00F30076**

**Explanation:** An error occurred while attempting to obtain a CCB.

This abend reason code is issued by the following CSECT: DSN3TM00

**System Action:** The allied user is abended with code X'04E' and this reason code.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** An SVC dump, associated SYS1.LOGREC entries, and SYSLOG should be available. If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** General purpose register 2 contains a reason code from authorization services that indicates the cause of the failure.

Collect the following diagnostic items listed in *Appendix B: "Problem determination" on page 1051* 1, 2, 5.

---

**00F30077**

**Explanation:** A plan or package could not be executed for one of these reasons:

- It is disabled in the environment in which you attempted to run.
- The attach library that you are using is from a previous release of DB2 that does not support the ENABLE and DISABLE options of the bind operation.

This reason code is issued by the following CSECT: DSN3CT30

**System Action:** The plan or package is not executed.

**System Programmer Response:** One of the following:

- Rebind the plan or package to enable it to execute in the present environment.
- Check the SYSPLSYSTEM or SYSPKSYSTEM catalog table to find an environment in which the plan or package can be executed.
- Correct the attach library.
Explanation: An abend occurred during an attempt to access the caller-provided connecting system type code while executing in the PSW key of the caller. This is probably the result of a logic error in the requesting program.

This abend reason code is issued by the following CSECT: DSN3ID30

System Action: The request is not processed.

User Response: A dump should be taken for problem analysis.

Problem Determination: This reason code is placed in register 15 during any access to caller-provided information. When any abend occurs this register indicates which parameter caused the error.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2, 5.

00F30080

Explanation: CSECT DSNAPRHX was unable to cancel its ESTAE.

This abend reason code is issued by the following CSECT: DSNAPRHX

System Action: The application program is abended with code X’04E’ and this reason code.

User Response: Notify the system programmer. The application may be retried.

System Programmer Response: See Problem Determination.

Problem Determination: A nonzero return code was received from the Cancel ESTAE operation. The return code has been placed into Register 2. Refer to MVS/ESA Programming: Assembler Services Reference for the meaning of the return code.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2, 4, 5.

00F30081

Explanation: An abend occurred during an attempt to access the caller-provided accounting token field while executing in the key of the caller. This is probably the result of a logic error in the requesting program.

This abend reason code is issued by the following CSECT: DSN3S3I30

System Action: The SIGNON request is not processed.

User Response: You may retry from your recovery routine (ESTAE) and continue execution with the same level of capability you had before the request was abnormally terminated.

Problem Determination: The reason code is placed in register 15 prior to any access to caller-provided information.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2, 5.

00F30082

Explanation: This reason code is returned when the automatic bind for plan is disabled. The automatic bind is disabled through the installation process.

This reason code is issued by the following CSECT: DSN3CT30

System Action: The plan is not automatically bound.

System Programmer Response: Rebind the plan prior to execution.

00F30083

Explanation: This reason code is returned because an allied application, or its recovery routine, attempted to issue an SQL request following an abend that could not be retried (that is, CANCEL, DETACH).

This reason code is issued by the following CSECT: DSNAPRHX

System Action: Control is returned to the calling program, either the application program or its recovery routine, so that end-of-task processing can take place.

User Response: If you feel that this is a DB2 problem, notify the system programmer.

System Programmer Response: This reason code is issued because an allied application had an MVS CANCEL or DETACH issued against it and its recovery routine either retrieved back to the application, or did itself, try to execute another SQL statement to DB2. This call is rejected to help allow the application to be processed through end-of-task processing.

Problem Determination: If you believe that this error is not the result of the above reason, then collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 5.

00F30085

Explanation: The requester's password could not be verified. This condition might indicate a security violation.

System Action: The connection request is not processed.

User Response: Verify that you specified the correct RACF password for this requester.

System Programmer Response: Examine the console/SYSLOG output for RACF messages issued when a request is denied. If this error occurred during a remote connection request, examine the communications database to determine the security controls in effect for a remote connection request. Refer to Section 3 (Volume 1) of DB2 Administration Guide for examples of how to set up the security controls for remote connection requests in the communications database.

Problem Determination: During remote connection processing, Authorization Services invokes the RACROUTE service using the RACF RACINIT form to verify the authorization ID and password, if supplied, associated with the requester. If the RACF return code indicates the password could not be verified, the connection request is terminated with this reason code.

This reason code is issued by the following CSECT: DSN3AUCN
00F30086

Explanation: The requester's password is expired. This condition might indicate a security violation.

System Action: The connection request is not processed.

User Response: Change your password so that it is no longer expired.

System Programmer Response: Examine the console/SYSLOG output for RACF messages issued when a request is denied. If this error occurred during a remote connection request, examine the communications database to determine the security controls in effect for a remote connection request. Refer to Section 3 (Volume 1) of DB2 Administration Guide for examples of how to set up the security controls for remote connection requests in the communications database.

Problem Determination: During remote connection processing, Authorization Services invokes the RACROUTE service using the RACF RACINIT form to verify the authorization ID and password, if supplied, associated with the requester. If the RACF return code indicates that the password expired, the connection request is terminated with this reason code.

This reason code is issued by the following CSECT: DSN3AUCN

00F30087

Explanation: The requester's authorization ID or password could not be verified by the site's security exit routine. This condition might indicate a security violation.

System Action: The connection request is not processed.

User Response: Verify that you specified the correct RACF authorization ID and password. If necessary, request authorization to the DB2 subsystem from your security administrator.

System Programmer Response: Examine the console/SYSLOG output for RACF messages issued when a request is denied. If this error occurred during a remote connection request, examine the communications database to determine the security controls in effect for a remote connection request. Refer to Section 3 (Volume 1) of DB2 Administration Guide for examples of how to set up the security controls for remote connection requests in the communications database.

Problem Determination: During remote connection processing, Authorization Services invokes the RACROUTE service using the RACF RACINIT form to verify the authorization ID and password, if supplied, associated with the requester. If the RACF return code indicates that the requester's authorization ID was revoked, the connection request is terminated with this reason code.

This reason code is issued by the following CSECT: DSN3AUCN

00F30088

Explanation: The requester's authorization ID was revoked. This condition might indicate a security violation.

System Action: The connection request is not processed.

User Response: Verify that you specified the correct RACF authorization ID and password. If necessary, request authorization to the DB2 subsystem from your security administrator.

System Programmer Response: Examine the console/SYSLOG output for RACF messages issued when a request is denied. If this error occurred during a remote connection request, examine the communications database to determine the security controls in effect for a remote connection request. Refer to Section 3 (Volume 1) of DB2 Administration Guide for examples of how to set up the security controls for remote connection requests in the communications database.

Problem Determination: During remote connection processing, Authorization Services invokes the RACROUTE service using the RACF RACINIT form to verify the authorization ID and password, if supplied, associated with the requester. If the RACF return code indicates that the requester's authorization ID was revoked, the connection request is terminated with this reason code.

This reason code is issued by the following CSECT: DSN3AUCN

00F30089

Explanation: The requester's authorization ID is not defined to RACF. This condition might indicate a security violation.

System Action: The connection request is not processed.

User Response: Verify that you specified the correct RACF authorization ID and password. If necessary, request authorization to the DB2 subsystem from your security administrator.

System Programmer Response: Examine the console/SYSLOG output for RACF messages issued when a request is denied. If this error occurred during a remote connection request, examine the communications database to determine the security controls in effect for a remote connection request. Refer to Section 3 (Volume 1) of DB2 Administration Guide for examples of how to set up the security controls for remote connection requests in the communications database.

Problem Determination: During remote connection processing, Authorization Services invokes the RACROUTE service using the RACF RACINIT form to verify the authorization ID and password, if supplied, associated with the requester. If the RACF return code indicates that the requester's authorization ID is not defined, the connection request is terminated with this reason code.

This reason code is issued by the following CSECT: DSN3AUCN

00F30090

Explanation: The application program issued an RRSAF SIGNON or AUTH SIGNON function request, but the application either has OPEN CURSORS or SPECIAL REGISTERS that are not in their initial state and the reuse=INITIAL rule is in effect.

System Action: The SIGNON or AUTH SIGNON request is not processed.

User Response: You can continue processing with a corrected request.

Problem Determination: This reason code is issued by the following CSECT: DSN3SI30
Explanation: The application program issued an RRSAF IDENTIFY function request, but RRS/MVS is not available.

System Action: The IDENTIFY request is not processed.

User Response: Retry the IDENTIFY request after RRS/MVS has been started.

Problem Determination: This reason code is issued by the following CSECT: DSN3ID30

Explanation: The application program issued an RRSAF SIGNON or AUTH SIGNON function request, but the application has issued an SQL request since the last invocation of SRRCMIT or SRRBACK and therefore is not at a point of consistency.

System Action: The SIGNON or AUTH SIGNON request is not processed.

User Response: You can continue processing with a corrected request.

Problem Determination: This reason code is issued by the following CSECT: DSN3SI30

Explanation: The application program issued an RRSAF TERMINATE THREAD or TERMINATE IDENTIFY function request, but the application has issued an SQL request since the last invocation of SRRCMIT or SRRBACK and therefore is not at a point of consistency.

System Action: The function request is not processed.

User Response: You can continue processing with a corrected request.

Problem Determination: This reason code is issued by the following CSECT: DSN3CT80 DSN3ID80

Explanation: During remote connection processing, Authorization Services invokes the RACROUTE service using the RACF RACINIT form to verify the authorization ID and password associated with the requester, and changes the password to a new password (if supplied). If the RACF return code indicates that the requester's new password is invalid, the connection request is terminated with this reason code.

System Action: The connection request is not processed.

User Response: Verify that your new password value meets the installation's requirements for new passwords.

System Programmer Response: Examine the console/SYSLOG output for RACF messages issued when the request was denied.

This reason code is issued by the following CSECT: DSN3AUCN

Explanation: An internal error was detected in either DB2 or OS/390 RRS.

System Action: The application is abended. This error may, in many cases, eventually abend the DB2 subsystem.

Operator Response: Notify the system programmer.

System Programmer Response: This is probably either an error in DB2 or in OS/390 RRS. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: DB2 records on the SYS1.LOGREC data set and requests an SVC dump. The error indicates that there may be a problem with DB2 or with OS/390 RRS.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2, 5.

This abend reason code is issued by the following CSECTs: DSN3SQLF, DSN3CMIT, DSN3CT30, DSN3SPIN, DSN3SPTN, DSN3BABR, DSN3CM2T, DSN3CTXS, DSN3RRSX

Explanation: An internal error was detected in either DB2 or OS/390 RRS Context Services.

System Action: The application is abended. This error can, in many cases, eventually abend the DB2 subsystem.

Operator Response: Notify the system programmer.

System Programmer Response: This is probably either an error in DB2 or in OS/390 RRS. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: DB2 records on the SYS1.LOGREC data set and requests an SVC dump. The error indicates that there can be a problem with DB2 or with OS/390 RRS Context Services.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2, 5.

This abend reason code is issued by the following CSECTs: DSN3ID30, DSN3ID80, DSN3SPIN, DSN3SPTN

Explanation: The context_key supplied via the CONTEXT SIGNON function of RRSAF is not associated with the current context.

System Action: CONTEXT SIGNON is not performed.

User Response: Use CTXSDTA to store the primary authid in the context data associated with the current context before invoking CONTEXT SIGNON. The context_key used to store the data must be the context_key that is passed as input to CONTEXT SIGNON.

Problem Determination: This reason code is issued by the following CSECT: DSN3SI30
00F30098

Explanation: The CONTEXT SIGNON function of RRSAF requires OS/390 R5 or later.

System Action: CONTEXT SIGNON is not performed.

User Response: Check the release level of OS/390 that you are running on.

Problem Determination: This reason code is issued by the following CSECT: DSN3SI30

00F30099

Explanation: The data retrieved using the context_key passed via the CONTEXT SIGNON function of RRSAF is a version not supported by DB2.

System Action: CONTEXT SIGNON is not performed.

User Response: Determine the version number supported by the DB2 release you are running. This is described in the description of CONTEXT SIGNON in the DB2 Application Programming and SQL Guide. Use CTXSDTA to store the correct version of the context data associated with the current context before invoking CONTEXT SIGNON.

Problem Determination: This reason code is issued by the following CSECT: DSN3SI30

00F3009A

Explanation: An attempt to was made to invoke the DB2 API for an agent that was currently performing syncpoint processing. This could occur if an RRSAF attached application invoked DB2 after another control task had already initiated RRS syncpoint processing for the same DB2 agent.

After syncpoint processing has been initiated on behalf of an agent that is connected by RRSAF to DB2, the DB2 API may not be used to access DB2 until the syncpoint processing completes.

System Action: The API request is rejected.

User Response: Serialize the initiation of RRS syncpoint processing with the use of the DB2 API.

00F3009B

Explanation: The RRSAF prepare exit was invoked for a DB2 agent that is currently executing in DB2.

This could occur if a control task initiated RRS syncpoint processing for a DB2 agent while an application task was accessing DB2 data using the same DB2 agent.

Once a DB2 agent is active in DB2, another task may not initiate RRS syncpoint processing for the same agent.

System Action: DB2 returns ATRABACK to the prepare request. The DB2 agent is abended with reason 00E50013.

User Response: Serialize the initiation of RRS syncpoint processing with accessing DB2 data.

00F3009C

Explanation: An RRS syncpoint exit was invoked for a DB2 agent by a task different than the task currently associated with the DB2 agent and the DB2 early code module installed on the system does not support this function.

System Action: The RRS syncpoint request is abended. This will result in DB2 losing it's connection with RRS. The DB2 subsystem must be stopped and then started again in order to establish a new connection with RRS.

Operator Response: Notify the system programmer.

System Programmer Response: The version of the DB2 early code that was loaded from the LINKLIST library does not support RRS syncpoints initiated from a task that is not connected to the DB2 agent associated with the RRS unit of recovery for which syncpoint processing is being initiated. The DB2 early code must either be the DB2 V5 with APAR PQ16273 applied or the DB2 V6 early code. Make sure a compatible version of the DB2 early code will be loaded and then re-ipl the system.

Problem Determination: An entry recording this condition is written in SYS1.LOGREC.

00F3009D

Explanation: An abend occurred during an attempt to access the caller-provided user ID while executing in the PSW key of the caller. This is probably the result of a logic error in the requesting program.

System Action: The SIGNON request is not processed.

User Response: You may retry from your recovery routine (ESTAE) and continue execution with the same level of capability you had before the request was abnormally terminated.

Problem Determination: The reason code is placed in register 15 prior to any access to caller-provided information.

Collect the following diagnostic items listed in Appendix B: Problem determination on page 1051: 1, 2, 5.

00F3009E

Explanation: An abend occurred during an attempt to access the caller-provided application name while executing in the PSW key of the caller. This is probably the result of a logic error in the requesting program.

System Action: The SIGNON request is not processed.

User Response: You may retry from your recovery routine (ESTAE) and continue execution with the same level of capability you had before the request was abnormally terminated.

Problem Determination: The reason code is placed in register 15 prior to any access to caller-provided information.

Collect the following diagnostic items listed in Appendix B: Problem determination on page 1051: 1, 2, 5.
00F3009f
Explanation: An abend occurred during an attempt to access the caller-provided workstation name while executing in the PSW key of the caller. This is probably the result of a logic error in the requesting program.
System Action: The SIGNON request is not processed.
User Response: You may retry from your recovery routine (ESTAE) and continue execution with the same level of capability you had before the request was abnormally terminated.
Problem Determination: The reason code is placed in register 15 prior to any access to caller-provided information.
Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 5.

00F30101
Explanation: The parameter contained in the IEFSSNx0 member used to initialize DB2 (and other subsystems) is in error. For details, refer to message DSN3011I for details.
This abend code is issued by the following CSECT: DSN3UR00
System Programmer Response: See message DSN3101I.
Problem Determination: Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 5.

00F30102
Explanation: The parameter contained in the IEFSSNx0 member used to initialize DB2 (and other subsystems) is in error. The DB2 subsystem recognition character must be not be blank. For details, refer to message DSN3102I.
This abend code is issued by the following CSECT: DSN3UR00
System Programmer Response: See message DSN3102I.
Problem Determination: Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 5.

00F30103
Explanation: The parameter contained in the IEFSSNx0 member used to initialize DB2 (and other subsystems) is in error and/or the named module is not resident in a library available during IPL. Refer to message DSN3103I for details.
This abend code is issued by the following CSECT: DSN3UR00
System Programmer Response: See message DSN3103I.
Problem Determination: The reason code is placed in register 15 prior to any access to caller-provided information.
Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 5.

00F30104
Explanation: Module DSN3UR00 was unable to obtain the DB2 subsystem affinity table index for the named subsystem. MVS did not recognize the named subsystem. Refer to message DSN3109I for details.
This abend code is issued by the following CSECT: DSN3UR00
System Programmer Response: See message DSN3109I.
Problem Determination: Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 5.

00F30105
Explanation: Module DSN3UR00 was unable to load Early module 'DSN3EPX'. Either there was an I/O error, or the named module is not resident in a library available during IPL. Refer to message DSN3105I for details.
This abend reason code is issued by the following CSECT: DSN3UR00
System Programmer Response: See message DSN3105I.
Problem Determination: Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 5.

00F30106
Explanation: An extract of a global transaction identifier from RRS failed for a SIGNON request. The SIGNON request was for a thread that indicated it was part of a global transaction and that RRS was to provide the global transaction id.
System Action: The SIGNON request is not processed.
User Response: You can continue processing with a corrected request.

00F30107
Explanation: An abnormal termination occurred during an attempt to access the caller-provided xid parameter while executing in the PSW key of the caller. This is probably the result of a logic error in the requesting program.
System Action: The SIGNON request is not processed.
User Response: Correct the problem and submit your job again.
Problem Determination: The reason code is placed in register 15 prior to any access to caller-provided information.
Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 5.

00F30111
Explanation: The DB2 program which establishes DB2 as an MVS subsystem during Master Scheduler initialization has determined that either its own load module or a load module loaded by it does not have the attributes AMODE(31) and RMODE(ANY). Message DSN3111I was issued just prior to the abend. This message contains the name of the load module in error.
This abend reason code is issued by the following CSECT: DSN3UR00

**System Action:** DB2 subsystem initialization is terminated.

**System Programmer Response:** See message DSN3111I.

### $00F30112$

**Explanation:** DB2 is unable to register the installation-specified command prefix with MVS. The command prefix is specified in the subsystem definition parameter. The subsystem specified by *ssnm* in message DSN3112I is not available.

This abend reason code is issued by following CSECT: DSN3UR00

**System Programmer Response:** See message DSN3112I.

### $00F30113$

**Explanation:** DB2 detected an error in the subsystem definition parameter, which is obtained from the IEFSSNxx member of SYS1.PARMLIB. The subsystem specified by *ssnm* in message DSN3113I is not available. This abend reason code is issued by following CSECT: DSN3UR00

**System Programmer Response:** See message DSN3113I.

### $00F30114$

**Explanation:** DB2 group attach is not supported on this release of MVS. DB2 found an installation-specified group attach name specified in the subsystem definition parameter, IEFSSNxx, but DB2 group attach is not supported on this release of MVS. DB2’s group attach feature requires MVS/ESA SP4.2.2 or higher.

This abend reason code is issued by the following CSECT: DSN3UR00

**System Action:** The DB2 subsystem is not available.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Correct the subsystem definition parameter to not specify a group attach name and re-IPL.

**Problem Determination:** Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested.

Collect the following diagnostic items: CONSOLE LOG, SVCdump, and LOGREC.

### $00F30115$

**Explanation:** DB2 received a nonzero return code from the MVS Name/Token service IEANTCR when DB2 attempted to register the group attach name. The group attach name is specified in the subsystem definition parameter, IEFSSNxx. The DB2 subsystem is unavailable.

This abend reason code is issued by following CSECT: DSN3UR00

**System Action:** The DB2 subsystem is not available.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Contact the IBM Support Center.

**Problem Determination:** Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. Register 3 contains the return code, in hexadecimal, that was returned to DB2 from MVS IEANTCR Name/Token services.

Collect the following diagnostic items: CONSOLE, SVCdump, LOGREC.

### $00F30116$

**Explanation:** The version of the DB2 early code module that you are attempting to use is not compatible with this version of MVS. This version of DB2 requires MVS/ESA.

**System Action:** The DB2 subsystem is not available.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** The version of the DB2 early code that was loaded from the LINKLIST library is not compatible with the release of MVS that you are using. Change the concatenation order of the LINKLIST library so that a compatible release of DB2 early code is used.

**Problem Determination:** Diagnostic information is recorded in SYS1.LOGREC and a DB2 dump is requested.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 3, 5.

This abend reason code is issued by following CSECT: DSN3UR00

### $00F30203$

**Explanation:** This reason code is returned when a DB2 program attempts to either activate an already active SSI function code or deactivate an already inactive SSI function code. This reason code is not normally visible to users or operators, but may appear in DB2 traces.

**System Action:** The caller is abended.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** One of these conditions exists:

- Module DSN3RS0X received a nonzero return code from ENQ (exclusive).
- Module DSN3ENQ0 received a nonzero return code from ENQ (shared) and the indication was other than ‘the task already has the resource enqueued’.

This is a serious error.

This abend reason code is issued by the following CSECTs: DSN3ENQ0, DSN3RS0X.

**System Action:** The caller is abended.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** To determine the error return from the ENQ SVC, examine the SVC dump.

**Problem Determination:** An SVC dump and associated SYS1.LOGREC entries are produced. Register 2 at the time of the abend contains the value passed back by ENQ in register 15. This can be used to locate the response area.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2, 5.
Explanation: One of the following conditions exists:

- Module DSN3DEQ0 wanted to release the resource unconditionally but did not have it to release.
- Module DSN3RS0X received a nonzero return code from DEQ and the indication was other than ‘the task had not been assigned control’.

This is a serious error.

This abend reason code is issued by the following CSECTs: DSN3DEQ0, DSN3RS0X.

System Action: The caller is abended. The current request has probably been processed completely. However, processing serialization may not have been maintained.

Operator Response: Notify the system programmer.

System Programmer Response: To determine the DB2 service module running in the wrong PSW key, examine the SVC dump.

Problem Determination: An SVC dump and associated SYS1.LOGREC entries are produced. Register 2 at the time of the abend contains the value passed back by DEQ in register 15. This can be used to locate the response area.

Collect the following diagnostic items listed in Appendix B.

00F30212

Explanation: A function that is allowed only for DB2 key callers was invoked by a supervisor state caller in another key. (Problem state callers receive system X’OC2’ abend completion codes instead.)

This abend reason code is issued by the following CSECT: DSN3AC0X

System Action: The caller is abended.

Operator Response: Notify the system programmer.

System Programmer Response: To determine the DB2 service module running in the wrong PSW key, examine the SVC dump.

Problem Determination: If the invoker is a DB2 service module, an SVC dump and associated SYS1.LOGREC entries are produced. The invoker should have been in DB2 KEY 15 during the invocation.

Collect the following diagnostic items listed in Appendix B.

00F30213

Explanation: The invoker of module DSN3AC0X passed an invalid action code. The only valid codes are 0 (deactivate) and 1 (activate).

This abend reason code is issued by the following CSECT: DSN3AC0X

System Action: The caller is abended.

Operator Response: Notify the system programmer.

System Programmer Response: To determine the caller of the activate and deactivate service module, examine the SVC dump.

Problem Determination: An SVC dump and associated SYS1.LOGREC entries are produced by a DB2 service module. The save area chain should indicate the invoker of this service module.

Collect the following diagnostic items listed in Appendix B.

00F30214

Explanation: The invoker of module DSN3AC0X passed an invalid SSOB function code. The valid codes range from 1 to 255.

This abend reason code is issued by the following CSECT: DSN3AC0X

System Action: The caller is abended.

Operator Response: Notify the system programmer.

System Programmer Response: To determine the caller of the activate and deactivate service module, examine the SVC dump.

Problem Determination: An SVC dump and associated SYS1.LOGREC entries are produced by a DB2 service module. The save area chain should indicate the invoker of this service module.

Collect the following diagnostic items listed in Appendix B.

00F30215

Explanation: The invoker of module DSN3AC0X passed an invalid ‘QUEUE’ parameter. The storage provided could not be modified in the DB2 PSW key.

This abend reason code is issued by the following CSECT: DSN3AC0X

System Action: The caller is abended with system completion code of X’OC4’.

Operator Response: Notify the system programmer.

System Programmer Response: To determine the caller of the activate and deactivate service module, examine the SVC dump.

Problem Determination: An SVC dump and associated SYS1.LOGREC entries are produced by a DB2 service module. The save area chain should indicate the invoker of this service module. The invoker should have set a correct parameter value before invoking module DSN3AC0X.

Collect the following diagnostic items listed in Appendix B.

00F30216

Explanation: The ASCB for the newly created DB2 subsystem services address space could not be located. The presumption is that the DB2 subsystem has not been started successfully. Further entry of commands to the DB2 subsystem results in attempts to start DB2.

This abend reason code is issued by the following CSECT: DSN3EC0X

System Action: The current -START command processing is terminated. Subsequent commands are processed as though this command had not been processed.

Operator Response: Retry the command. If the command fails again, notify the system programmer.
System Programmer Response: If the command fails again, request an IPL of MVS, as the failure may be the result of an MVS internal problem.

Problem Determination: An SVC dump and associated SYS1.LOGREC entries are produced. The ASID passed back by the MVS command scheduler for the -START command is not valid.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 5.

00F3017
Explanation: The console ID for the MVS console that entered the current command is not found in the MVS unit control module (UCM) structure. This is a serious error. An internal MVS START command may have been incorrectly issued by an application program that provided invalid input parameters.

This abend reason code is issued by the following CSECT: DSN3EC0X

System Action: The caller is abended.

Operator Response: Retry the -START DB2 command. If the command fails again, notify the system programmer.

System Programmer Response: If the command fails again, request a stand-alone dump and an IPL of MVS, as this may be due to an MVS internal problem.

Problem Determination: The SSOB command extension mapped by IEFSSCM contains the invalid console ID.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 5.

00F3018
Explanation: The ERLY block for this DB2 subsystem is in error. The control word that manages identify processing is in an undefined state. This is a serious error.

This abend reason code is issued by the following CSECT: DSN3EC0X

System Action: The current TCB is abended. Two possible reasons are:
- There is no DB2 subsystem services address space. Therefore, the initial command state can safely be set in an undefined state. This is a serious error. The ERLY block for this DB2 subsystem results in further attempts to start DB2.
- The system services address space ASID is known, but the state of the DB2 subsystem is uncertain. In this case, the command facility is considered disabled, and message DSN3108I is returned to the issuer of the command.

Operator Response: Notify the system programmer.

System Programmer Response: Examine the ERLY block field ERLYCMST. If the ERLY block is in error. The control word that manages EOM broadcast processing is in an undefined state. This is a serious error.

If the command fails again, request a stand-alone dump and re-IPL MVS.

System Programmer Response: Examine the ERLY block field ERLYEMST. If the value of ERLYEMST is greater than 2, it is in error.

Problem Determination: The calling TCB may have requested an SVC dump or created associated SYS1.LOGREC entries.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 5.

00F3019
Explanation: The ERLY block for this DB2 subsystem is in error. The control word that manages identify processing is in an undefined state. This is a serious error.

If the command fails again, request a stand-alone dump and re-IPL MVS.

System Action: The calling TCB is abended.

Operator Response: Cancel DB2. (End of task processing may still work, and it does a more complete clean-up than end-of-memory processing does.) If this does not work, issue the MVS FORCE command for the DB2 address spaces. If the problem is still unresolved, request a stand-alone dump and re-IPL MVS.

System Programmer Response: Examine the ERLY block field ERLYIDST. If the value of ERLYIDST is greater than 2, it is in error.

Problem Determination: The calling TCB may have requested an SVC dump or created associated SYS1.LOGREC entries.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 5.

00F3021A
Explanation: The ERLY block for this DB2 subsystem is in error. The control word that manages identify processing is in an undefined state. This is a serious error.

This abend reason code is issued by the following CSECT: DSN3CL0X

System Action: The calling TCB is abended.

Operator Response: Stop the DB2 subsystem and reissue the -START DB2 command.

System Programmer Response: Examine the ERLY block field ERLYIDST. If the value of ERLYIDST is greater than 2, it is in error.

Problem Determination: An SVC dump and associated SYS1.LOGREC entries are produced.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 5.

00F3021B
Explanation: A return code other than 0, 4, or 8 was received from the MVS internal START command processor. The presumption is that the DB2 subsystem has not been started successfully. Further entry of commands to the DB2 subsystem results in further attempts to start DB2.

This abend reason code is issued by the following CSECT: DSN3EC0X

System Action: The current -START command processing is abended. Subsequent commands are processed as though this command had not been processed.

Operator Response: Retry the command. If the command fails again, request a stand-alone dump and re-IPL MVS.

System Programmer Response: Examine the SVC dump, LOGREC entries, and the console log for indications of an MVS failure.

Problem Determination: An SVC dump and associated SYS1.LOGREC entries are produced.
Module DSN3RS0X could not establish an ESTAE during the processing of the first (presumed to be the -START command) command. The caller is abended. This can occur if the MVS system address space that is broadcasting the command has insufficient storage. Further entry of commands to the DB2 subsystem may result in a successful start of DB2.

This abend reason code is issued by the following CSECT: DSN3EC0X

**System Programmer Response:** Notify the system programmer.

**Operator Response:** Notify the system programmer.

**Problem Determination:** A SYSUDUMP is requested. Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051, 1, 4, 5.

---

Module DSN3RS0X discovered that the SSVT was not set to its initial state at DB2 subsystem initialization or termination time. An abend is issued in order to record SYS1.LGOREC data and request an SVC dump.

This abend reason code is issued by the following CSECT: DSN3RS0X

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The SVC dump contains an image of the SSCVT and the SSVT. Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051, 1, 2, 5.

---

Module DSN3RS0X discovered that the PRHB was not set to its initial state at DB2 subsystem initialization or termination time. An abend is issued in order to record SYS1.LGOREC data and request an SVC dump.

This abend reason code is issued by the following CSECT: DSN3RS0X

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The associated SYS1.LGOREC entries and SVC dump contain the relevant information.
Collect the following diagnostic items listed in [Appendix B](#) "Problem determination" on page 1051 1, 2, 5.

### 00F30230

**Explanation:** The module DSN3SSLM discovered that a user exit still exists for an allied address space that is being disconnected from DB2. This is an internal error. This abort reason code is issued by the following CSECT: DSN3SSLM

**System Action:** The connection between the allied address space and the DB2 subsystem is terminated.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Refer to Section 3 of [DB2 Diagnosis Guide and Reference](#) for information on identifying and reporting the problem.

**Problem Determination:** A previous part of the disconnection process between DB2 and an allied address space has either not completed or terminated in error. The SVC dump and associated SYS1.LOGREC entries contain the relevant material for problem analysis.

Collect the following diagnostic items listed in [Appendix B](#) "Problem determination" on page 1051 1, 2, 5.

### 00F30310

**Explanation:** A nonzero return code was received from the recovery manager. It is issued by module DSN3RIAO (application resolve-indoubt-UR) and by module DSN3RIM0 (resource manager resolve-indoubt-UR). This abort reason code is issued by the following CSECTs: DSN3RIAO, DSN3RIM0

**System Action:** This is a DB2 error. The invoker is abended.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Collect the related materials. Determine the called recovery manager module and the module that issued the abend.

**Problem Determination:** The associated SYS1.LOGREC entry indicates which module issued the abend. Check the recovery manager resolve-indoubt exit trace for the return code.

Collect the following diagnostic items listed in [Appendix B](#) "Problem determination" on page 1051 1, 2, 5.

### 00F30311

**Explanation:** Module DSN3RIM0 could not establish an ESTAE during the processing of a resolve-indoubt-UR (RMRQ) request. This can occur if the current address space has insufficient storage. This probably leads to an abnormal termination of the DB2 subsystem.

This abort reason code is issued by the following CSECT: DSN3RIM0

**System Action:** The caller is abended (without ABDUMP).

**Operator Response:** Notify the system programmer, and restart DB2 if necessary.

**System Programmer Response:** Examine the usage and free areas in the local system queue area (LSQA) portion of the current address space private area. If necessary, have the size of the private area expanded.

**Problem Determination:** The caller should produce a SYS1.LOGREC entry and an SVC dump, so that the system programmer can examine the LSQA area.

Collect the following diagnostic items listed in [Appendix B](#) "Problem determination" on page 1051 1, 2, 5.

### 00F30312

**Explanation:** Module DSN3RIA0 could not establish an ESTAE during the processing of a resolve-indoubt-UR (RARQ) request. This can occur if the current address space has insufficient storage. This abort reason code is issued by the following CSECT: DSN3RIA0

**System Action:** The caller is abended (without ABDUMP).

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Examine the usage and free areas in the local system queue area (LSQA) portion of the current address space private area. If necessary, have the size of the private area expanded.

**Problem Determination:** The caller should produce a SYS1.LOGREC entry and an SVC dump.

Collect the following diagnostic items listed in [Appendix B](#) "Problem determination" on page 1051 1, 2, 5.

### 00F30313

**Explanation:** A CCB could not be allocated. This could occur when the storage pool has no more free space available.

This abort reason code is issued by the following CSECT: DSN3RIB2

**System Action:** The request to obtain a CCB is not processed. The application program is abended with code X'04E' and this reason code.

**User Response:** A dump should be taken for problem analysis.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of [DB2 Diagnosis Guide and Reference](#) for information on identifying and reporting the problem.

**Problem Determination:** This is usually caused by a previous error that has recorded data on the SYS1.LOGREC data set and requested an SVC dump. The SYS1.LOGREC entries and SVC dump(s) should be examined to determine the actual cause of the error.

Collect the following diagnostic items listed in [Appendix B](#) "Problem determination" on page 1051 1, 2.

### 00F30400

**Explanation:** This reason code is returned when a DB2 program makes a duplicate request to be called when a specific SSI function code is encountered on the SSI.

This reason code is not normally visible to users or operators, but might appear in DB2 traces.

**System Programmer Response:** Collect the diagnostics produced by the application program reporting the failure, if any.

**Problem Determination:** Follow the instructions indicated by the diagnostics.
00F30401

Explanation: This reason code is returned when a DB2 program makes a request to no longer be called when a specific SSI function code is encountered on the SSI, but the control block representing the original request to be called is busy and cannot be deleted now. The request is processed when the control block is no longer busy.

This reason code is not normally visible to users or operators, but might appear in DB2 traces.

System Programmer Response: Collect the diagnostics produced by the application program reporting the failure, if any.

Problem Determination: Follow the instructions indicated by the diagnostics.

00F30402

Explanation: This reason code is returned when a DB2 program makes a request to no longer be called when a specific SSI function code is encountered on the SSI, but the control block representing the original request to be called cannot be found.

This reason code is not normally visible to users or operators, but might appear in DB2 traces.

System Programmer Response: Collect the diagnostics produced by the application program reporting the failure, if any.

Problem Determination: Follow the instructions indicated by the diagnostics.

00F30405

Explanation: The DB2 subsystem was abended by module DSN3SSI1 because the system services address space’s jobstep task terminated.

This abend reason code is issued by the following CSECT: DSN3SSI1

System Action: The DB2 subsystem is terminated with an SVC dump.

Operator Response: You can start DB2 again after it terminates.

System Programmer Response: At least one SVC dump and associated SYS1.LOGREC entries should be available. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: This is usually caused by a previous error that has recorded data on the SYS1.LOGREC data sets and requested an SVC dump. Examine the SYS1.LOGREC entries and SVC dumps to determine the actual cause of the error. Refer to "DB2 abend completion codes (X'04E' and X'04F') on page 6 for information on X'04E' and X'04F' abend completion codes.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2.

00F30406

Explanation: The DB2 subsystem was abended by module DSN3SSI1 because the system services address space was forced to an end-of-memory condition.

This abend reason code is issued by the following CSECT: DSN3SSI1

System Action: The DB2 subsystem is terminated with an SVC dump.

Operator Response: You can start DB2 again after it terminates.

System Programmer Response: At least one SVC dump and associated SYS1.LOGREC entries should be available. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: This is usually caused by a previous error that has recorded data on the SYS1.LOGREC data sets and requested an SVC dump. Examine the SYS1.LOGREC entries and SVC dumps to determine the actual cause of the error. Refer to "DB2 abend completion codes (X'04E' and X'04F') on page 6 for information on X'04E' and X'04F' abend completion codes.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2.

00F30407

Explanation: The DB2 subsystem was abended by module DSN3SSI1, because the jobstep task in a resource manager address space terminated.

This abend reason code is issued by the following CSECT: DSN3SSI1

System Action: The DB2 subsystem is terminated with an SVC dump.

Operator Response: You can start DB2 again after it terminates.

System Programmer Response: At least one SVC dump and associated SYS1.LOGREC entries should be available. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: This is usually caused by a previous error that has recorded data on the SYS1.LOGREC data set and requested an SVC dump. Examine the SYS1.LOGREC entries and SVC dumps to determine the actual cause of the error. Refer to "DB2 abend completion codes (X'04E' and X'04F') on page 6 for information on X'04E' and X'04F' abend completion codes.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2.

00F30408

Explanation: The DB2 subsystem was terminated because a DB2 resource manager address space is in end-of-memory processing.

This abend reason code is issued by the following CSECT: DSN3SSI1

System Action: The DB2 subsystem is terminated with an SVC dump.
**Operator Response:** DB2 can be started again after it terminates.

**System Programmer Response:** At least one SVC dump and associated SYS1.LOGREC entries should be available. If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** This is usually caused by a previous error that has recorded data on the SYS1.LOGREC data set and requested an SVC dump. The SYS1.LOGREC entries and SVC dump(s) should be examined to determine the actual cause of the error.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 3, 5.

---

**00F30409**

**Explanation:** The DB2 subsystem was abended by module DSN3SSES, because an allied task going through either end-of-task or one of its terminating ancestor tasks was in a DB2 must-complete function or was still holding DB2 latches.

This abend reason code is issued by the following CSECT: DSN3SSES

**System Action:** The DB2 subsystem is terminated with an SVC dump.

**Operator Response:** DB2 may be started again after it terminates.

**System Programmer Response:** At least one SVC dump and associated SYS1.LOGREC entries should be available. If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** This is usually caused by a previous error that has recorded data on the SYS1.LOGREC data set and requested an SVC dump. The SYS1.LOGREC entries and SVC dump(s) should be examined to determine the actual cause of the error.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2.

---

**00F3040A**

**Explanation:** The DB2 subsystem was abended by module DSN3SSI1, because an allied address space going through end-of-memory had one or more agents that either were in a DB2 must-complete function or were still holding DB2 latches.

This abend reason code is issued by the following CSECT: DSN3SSI1

**System Action:** The DB2 subsystem is terminated with an SVC dump.

**Operator Response:** DB2 may be started again after it terminates.

**System Programmer Response:** At least one SVC dump and associated SYS1.LOGREC entries should be available. If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** This is usually caused by a previous error that has recorded data on the SYS1.LOGREC data set and requested an SVC dump. The SYS1.LOGREC entries and SVC dump(s) should be examined to determine the actual cause of the error.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2.

---

**00F3040B**

**Explanation:** See message DSN3001I.

This abend reason code is issued by the following CSECT: DSN3SSI2

**System Programmer Response:** See message DSN3001I.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2, 5.

---

**00F3040C**

**Explanation:** The DB2 subsystem was abended because the SSSS IEFSSREQ service agent (EB) was in a DB2 must-complete function upon return from the agent services create allied agent function.

This abend reason code is issued by the following CSECT: DSN3SSI2

**System Action:** The DB2 subsystem is terminated with an SVC dump.

**Operator Response:** DB2 may be started again after it terminates.

**System Programmer Response:** At least one SVC dump and associated SYS1.LOGREC entries should be available. If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** This is usually caused by a previous error that has recorded data on the SYS1.LOGREC data set and requested an SVC dump. The SYS1.LOGREC entries and SVC dump(s) should be examined to determine the actual cause of the error.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2.

---

**00F3040D**

**Explanation:** The DB2 subsystem was abended because the SSSS IEFSSREQ service agent (EB) was in a DB2 must-complete function upon return from the agent services terminate allied agent function.

This abend reason code is issued by the following CSECTs: DSN3SSID0 DSN3SSI2 DSN3SSES

**System Action:** The DB2 subsystem is terminated with an SVC dump.

**Operator Response:** DB2 may be started again after it terminates.

**System Programmer Response:** At least one SVC dump and associated SYS1.LOGREC entries should be available. If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** This is usually caused by a previous error that has recorded data on the SYS1.LOGREC data set and requested an SVC dump. The SYS1.LOGREC entries...
and SVC dump(s) should be examined to determine the actual cause of the error.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 2.

00F3040E

Explanation: The DB2 subsystem was abended after a failure during processing of an IDENTIFY, COMMAND, or MVS HELP subsystem interface broadcast. The recovery routine DSN3SSESES attempted to clean up processing and pass the error to the caller, but was unable to do so.

This abend reason code is issued by the following CSECT: DSN3SSESES

System Action: The DB2 subsystem is terminated.

Operator Response: The DB2 subsystem should be restarted.

System Programmer Response: Scan the SYS1.LOGREC entries for the initial error and subsequent abends encountered by module DSN3SSESES. The ESTAE DSN3SSESES is established at least three times. Repetitive errors within the ESTAE module ultimately result in a subsystem termination with this reason code.

Problem Determination: Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 2.

00F3040F

Explanation: The DB2 subsystem was abended because a DB2 latch, critical to the deferred end of task (EOT) termination process, was held by an MVS dispatchable unit, normally in an allied address space, which was no longer being dispatched and was, therefore, unable to release the latch.

This DB2 termination reason code is issued by the following CSECTs:

DSN3SSESES DSN3SSI1 DSN3SSI2

System Action: The DB2 subsystem is terminated.

Operator Response: DB2 may be started again after it terminates.

System Programmer Response: At least one SVC dump and associated SYS1.LOGREC entries should be available. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: This is usually caused by a previous error associated with an allied address space and especially in the case where the allied address space has been forced to an end-of-memory condition.

The console output should be examined for errors associated with allied address spaces.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 2.

00F30410

Explanation: The DB2 subsystem was abended, because the end-of-task listening module failed during a must-complete window. End-of-task processing is considered to be in a must-complete state until an ESTAE has been established. The 'user' of this ESTAE routine was the allied end-of-task listening module DSN3EOT0.

This abend reason code is issued by the following CSECT: DSN3AAES

System Action: The DB2 subsystem is terminated.

Operator Response: DB2 may be started again after it terminates.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The recovery routine DSN3AAES has recorded data on the SYS1.LOGREC data set and requested an SVC dump. The SYS1.LOGREC entries and SVC dump(s) should be examined to determine the cause of the error.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 2.

00F30411

Explanation: The DB2 subsystem was abended because the abnormal termination of an agent failed during end-of-memory (EOM) processing for an allied address space. The 'user' of this ESTAE routine was the allied EOM routine DSN3EOM0.

This abend reason code is issued by the following CSECT: DSN3AAES

System Action: The DB2 subsystem is terminated.

Operator Response: Notify the system programmer. DB2 may be started again after it terminates.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The recovery routine DSN3AAES has recorded data on the SYS1.LOGREC data set and requested an SVC dump. The SYS1.LOGREC entries and SVC dump(s) should be examined to determine the cause of the error.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 2.

00F30412

Explanation: The DB2 subsystem was abended because the abnormal termination of an agent failed during resolve-indoubt processing for an allied agent. The 'user' of this ESTAE routine was the resolve-indoubt-UR RMRQ routine DSN3RIM0.

This abend reason code is issued by the following CSECT: DSN3AAES

System Action: The DB2 subsystem is terminated.

Operator Response: Notify the system programmer. DB2 may be started again after it terminates.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Problem Determination: The recovery routine DSN3AAES has recorded data on the SYS1.LOGREC data set and requested an SVC dump. The SYS1.LOGREC entries and SVC dump(s) should be examined to determine the cause of the error.

Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051 1, 2.

00F30413

Explanation: The DB2 subsystem was abended, because the abnormal termination of an agent failed. However, this recovery routine was unable to determine who its caller was. It should be one of the following: DSN3EOT0, DSN3EOM0, or DSN3RIM0.

This abend reason code is issued by the following CSECT: DSN3AAES

System Action: The DB2 subsystem is terminated.

Operator Response: DB2 may be started again after it terminates.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The recovery routine DSN3AAES has recorded data on the SYS1.LOGREC data set and has requested an SVC dump. The SYS1.LOGREC entries and SVC dump(s) should be examined to determine the cause of the error.

Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051 1, 2.

00F30414

Explanation: The DB2 subsystem was abended, because module DSN3SSI1 (or its caller, DSN3CL0X) was unable to establish the ESTAEs during the processing of an EOM SSI call. This is probably an MVS problem, because these modules are executing in the MVS master scheduler address space.

This abend reason code is issued by the following CSECT: DSN3SSI1

System Action: The DB2 subsystem is terminated.

Operator Response: DB2 may be started again after it terminates. If the failure persists, request a stand-alone dump and re-IPL MVS.

System Programmer Response: This can occur if the MVS master scheduler address space has insufficient free virtual storage. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: DB2 is unable to write a SYS1.LOGREC record or request a dump. The MVS master scheduler should have produced these diagnostic aids. Examine the dump to determine whether the problem is in MVS or DB2. Other unrelated failures in the MVS Master Scheduler address space would indicate an MVS problem.

Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051 1, 2, 3.

00F30416

Explanation: The DB2 subsystem was abended because module DSN3EOM0 was unable to establish the ESTAE during the processing of an EOM for an allied address space.

This abend reason code is issued by the following CSECT: DSN3EOM0

System Action: The DB2 subsystem is terminated.

Operator Response: DB2 may be started again after it terminates. If the failure persists, request a stand-alone dump and re-IPL MVS.

System Programmer Response: This can occur if the MVS master scheduler address space that is broadcasting the EOM has insufficient free virtual storage. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: DB2 is unable to write a SYS1.LOGREC record or request a dump. The MVS master scheduler should have produced these diagnostic aids. Examine the dump to determine whether the problem is in MVS or DB2. Other unrelated failures in the MVS Master Scheduler address space would indicate an MVS problem.

Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051 1, 2, 3.
00F30417

Explanation: The DB2 subsystem was abended because of a failure in the first end of task (FEOT) processing for a task that had established subsystem affinity to DB2.

This abend reason code is issued by the following CSECT: DSN3SSES

System Action: The DB2 subsystem is terminated.

Operator Response: DB2 can be started again after it terminates.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The recovery routine DSN3SSES has recorded data on the SYS1.LOGREC data set and requested an SVC dump. The SYS1.LOGREC entries and SVC dump(s) should be examined to determine the cause of the error.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2.

00F30418

Explanation: The DB2 subsystem was abended because of a failure in the end-of-memory (EOM) processing for an address space that had established subsystem affinity to DB2.

This abend reason code is issued by the following CSECT: DSN3SSES

System Action: The DB2 subsystem is terminated.

Operator Response: DB2 may be started again after it terminates.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The recovery routine DSN3SSES has recorded data on the SYS1.LOGREC data set and requested an SVC dump. The SYS1.LOGREC entries and SVC dump(s) should be examined to determine the cause of the error.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2.

00F3041B

Explanation: The DB2 subsystem was abended because of a DB2 latch, critical to the Deferred End of Task (EOT) Termination process, was held by an MVS dispatchable unit, normally in an allied address space, which was no longer being dispatched and was, therefore, unable to release the latch.

This abend reason code is issued by the following CSECTs: DSN3SSES

System Action: The DB2 subsystem is terminated with an SVC dump.

Operator Response: Notify the system programmer, and restart DB2.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: A SYS1.LOGREC entry and associated SVC dump were requested. Register 8 at the time of the abend contains the ACE pointer. The AGNT block whose AGNTEB field points to the EB contained within the ACE could not be located.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2.
00F3041C
Explanation: The DB2 subsystem was abended because of a failure of a MEMTERM request for an allied address space.
This abend reason code is issued by the following CSECTs: DSN3SSI1, DSN3SSES
System Action: The DB2 subsystem is terminated.
User Response: Notify the system programmer.
Operator Response: DB2 can be started again after it terminates.
System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Problem Determination: The recovery routine DSN3SSES recorded data on the SYS1.LOGREC data set and requested an SVC sump. The SYS1.LOGREC entries and the SVC dump should be examined to determine the cause of the error.
Collect the following diagnostic items listed in Appendix B.

00F30420
Explanation: A failure occurred during deferred end-of-task (EOT) processing for an agent.
This abend reason code is issued by the following CSECT: DSN3EOTS
System Action: The DB2 subsystem is terminated.
Operator Response: Notify the system programmer, and restart DB2.
System Programmer Response: Determine the module that failed and the registers at the time of the error. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Problem Determination: A SYS1.LOGREC entry and associated SVC dump were requested.
Collect the following diagnostic items listed in Appendix B.

00F30429
Explanation: A DB2 subsystem task (normally a service task) going through end-of-task (EOT), or one of its terminating ancestor tasks, was a DB2 must-complete function or was still holding one or more DB2 latches.
This abend reason code is issued by the following CSECT: DSN3SSI1
System Action: The DB2 subsystem is terminated with an SVC dump.
Operator Response: Notify the system programmer, and restart DB2.
System Programmer Response: At least one SVC dump and associated SYS1.LOGREC record(s) are available. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
Problem Determination: This is usually caused by a previous error that has recorded data in SYS1.LOGREC and requested an SVC dump. The SYS1.LOGREC record(s) and SVC dump should be examined to determine the actual cause of the error.
Collect the following diagnostic items listed in Appendix B.

00F30450
Explanation: CSECT DSN3CL0X could not establish an ESTAE during the processing of an identify SSI call. This can occur if the current address space has insufficient storage.
This abend reason code is issued by the following CSECT: DSN3CL0X
System Action: The allied address space is abended (without ABDUMP).
Operator Response: Notify the system programmer.
System Programmer Response: The user may retry the identify request. If a dump is available, review the virtual storage manager's control blocks to determine if all of the private area has been allocated. If necessary, increase the private area size of the allied address space.
Problem Determination: A dump should be produced by the allied task.
Collect the following diagnostic items listed in Appendix B.

00F30451
Explanation: CSECT DSN3SSI1 could not establish its ESTAEs during the processing of an identify SSI call. This can occur if the current address space has insufficient storage.
This abend reason code is issued by the following CSECT: DSN3SSI1
System Action: The allied task is abended (without ABDUMP).
Operator Response: Notify the system programmer.
System Programmer Response: The user may retry the identify request. If a dump is available, review the virtual storage manager's control blocks to determine if all of the private area has been allocated. If necessary, increase the private area size of the allied address space.
Problem Determination: A dump should be produced by the allied task.
Collect the following diagnostic items listed in Appendix B.

00F30452
Explanation: CSECT DSN3ID30 could not establish an ESTAE during the processing of an identify SSI call. This can occur if the current address space has insufficient storage.
This abend reason code is issued by the following CSECTs: DSN3ID30, DSN3SSI0
System Action: The allied task is abended (without ABDUMP).
Operator Response: Notify the system programmer.
System Programmer Response: The user may retry the identify request. If a dump is available, review the virtual storage manager's control blocks to determine if all of the
private area has been allocated. If necessary, increase the private area size of the allied address space.

**Problem Determination:** A dump should be produced by the allied task.

Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051 1, 2, 5.

---

**00F30453**

**Explanation:** CSECT DSN3SS1 could not establish its ESTAEs during the processing of an SSI call other than FEOT, EOM, HELP, COMMAND, and IDENTIFY. This can occur if the current address space has insufficient storage.

This abandoned reason code is issued by the following CSECT: DSN3SS1

**System Action:** The allied task is abended (without ABDUMP).

**Operator Response:** Notify the system programmer.

**System Programmer Response:** The user may retry the request. If a dump is available, review the virtual storage manager's control blocks to determine if all of the private area has been allocated. If necessary, increase the private area size of the allied address space.

**Problem Determination:** A dump should be produced by the allied task.

Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051 1, 2, 5.

---

**00F30454**

**Explanation:** After discovering an error during the processing of an SSI call, module DSN3SI1's retry routine found an unknown retry point when it was attempting to retry into the mainline code. This is a DB2 subsystem error.

This abandoned reason code is issued by the following CSECT: DSN3SS1

**System Action:** The allied task is abended.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** The user may retry the relevant SSI call. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The recovery routine DSN3SS1 has recorded data on the SYS1.LOGREC data set and requested an SVC dump. The SYS1.LOGREC entries and SVC dump(s) should be examined to determine the cause of the error.

Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051 1, 2, 5.

---

**00F30455**

**Explanation:** CSECT DSN3ID80 could not establish its ESTAE during the processing of the identify termination request. This can occur if the current address space has insufficient storage.

This abandoned reason code is issued by the following CSECT: DSN3ID80

**System Action:** The allied task is abended (without ABDUMP).

---

**00F30456**

**Explanation:** CSECT DSN3TM00 could not identify its caller. The only callers supported are: EOT, EOM, RIUR, and CNCL.

This abandoned reason code is issued by the following CSECT: DSN3TM00

**System Action:** The calling task is abended.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The caller's recovery routine may record on the SYS1.LOGREC data set and request an SVC dump. Module DSN3TM00 caller's parameter list, recorded in the trace entry, should be examined to determine the cause of the error, and new caller support should be added to DSN3TM00, if necessary.

Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051 1, 2, 5.

---

**00F30457**

**Explanation:** CSECT DSN3TM00 found that the agent termination did not take place after an extra termination request (DSNARARQ).

This abandoned reason code is issued by the following CSECT: DSN3TM00

**System Action:** The caller is abended. The caller may, in many cases, eventually abend the DB2 subsystem.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The caller's recovery routine records on the SYS1.LOGREC data set and requests an SVC dump. The error indicates that there may be a problem with the subsystem support subcomponent termination routines (namely DSN3ID80, DSN3SS180, and/or DSN3CT80).

Collect the following diagnostic items listed in Appendix B. "Problem determination" on page 1051 1, 2, 5.
**00F30458**

**Explanation:** The DB2 subsystem is abended because a user-exit module, either DSN3@ATH or DSN3@SGN, is not link-edited with the AMODE (31) attribute.

This abend reason code is issued by the following CSECT: DSN3AM1

**System Action:** Subsystem start-up is terminated.

**Operator Response:** DB2 may be restarted after the link-edit attributes of DSN3@ATH and/or DSN3@SGN have been changed to AMODE (31) RMODE (ANY).

**System Programmer Response:** Link-edit the user-exit module, specifying the attributes AMODE (31) RMODE (ANY).

**Problem Determination:** Refer to the JCL specifying link-edit attributes for the user exit module.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 2, 5.

**00F30459**

**Explanation:** The DB2 connection associated with an allied TCB could not be terminated. A RARQ request to terminate the connection could not be issued because either:

- The Resource Access List (RAL) address was zero in field ACERAL, or
- The SSAM Function Vector List (FVL) address in the RAL was zero.

This abend reason code is issued by the following CSECT: DSN3TM00

**System Action:** The DB2 subsystem is terminated with a reason code of X'00F30420'.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** This is a DB2 internal error. Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 2, 5.

**00F30460**

**Explanation:** The application is running in a WLM-established stored procedure address space and is attempting to connect to DB2 using a type of DB2 Attach other than RRSAF.

**System Action:** The application is abended.

**Operator Response:** Notify the system programmer.

**Programmer Response:** Modify, relink and rerun the application.

**System Programmer Response:** Use the MVS VARY WLM,APPLENV=name,REFRESH command to refresh the load module in storage.

**Problem Determination:** The problem may be that the Stored Procedure is link edited with or has loaded the DB2 call attachment facility language interface module DSNALI. Stored procedures that run in WLM-established address spaces must be link edited with or must load the RRS attachment facility language interface module DSNRLI.

This abend reason code is issued by the following CSECTs: DSN3ID30

**00F30461**

**Explanation:** DB2 was unable to successfully restart with OS/390 RRS because of an internal error in either DB2 or OS/390 RRS.

**System Action:** DB2 is not connected to RRS and all services dependent on that connection are unavailable. This means that applications may not connect to DB2 using RRSAF and that WLM-established address spaces may not be used for DB2 stored procedures until DB2 successfully restarts with OS/390 RRS.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Stop and then start OS/390 RRS. Stop and then start DB2. If the problem persists, perform an OS/390 RRS cold start. Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:**

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 2, 5.

This abend reason code is issued by the following CSECTs: DSN3RRSR, DSN3RRRS.

**00F30501**

**Explanation:** A nonzero return code has been received from the system parameter manager (SPM) subcomponent of DB2 when attempting to read a descriptor from the DSN3DIR1 directory. This descriptor is required in order to complete processing of the active sign-on or create thread. This is a serious error.

This abend reason code is issued by the following CSECTs: DSN3CT30, DSN3SI30

**System Action:** The requester is abended, and the request is not processed.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** An SVC dump should be available. Either the module issuing the abend has made an error in compounding the descriptor name (it is a concatenation of connection type and indicators representing the request type) or the descriptor, or information in the DSN3DIR1 directory is incorrect.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 2, 5.

**00F30502**

**Explanation:** A nonzero return code was received from agent service's create allied agent function during an identify or sign-on request. This indicates an allocation error that should not occur for these levels of capability.

This abend reason code is issued by the following CSECTs: DSN3ID50, DSN3SI30

**System Action:** The requester is abended, and the request is not processed.

**Operator Response:** Notify the system programmer.
00F30503  System Programmer Response:  If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination:  An SVC dump and associated SYS1.LOGREC entries should be available. Examine the DB2 trace table to determine which resource manager triggered the error indication. Also, the DSN3DIR1 entry for the appropriate protocol should be checked to ensure that only SSAM is specified to participate in allocation.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 5.

00F30503  Explanation:  The member DSN6SYSP is missing from DSNZPARM.

This abend reason code is issued by the following CSECT: DSN3AM1

System Action:  DB2 start-up is terminated.

System Programmer Response:  Refer to the coding procedure for DSNZPARM in Section 2 of DB2 Installation Guide.

Problem Determination:  DSN6SYSP CSECT is missing from the DSNZPARM load module.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 5.

00F30571  Explanation:  This reason code is returned when a DB2 program attempts to UNSPECIFY an already inactive Program Request Handler (PRH). The indicated PRH is inactive. This reason code merely provides extra information. This reason code is not normally visible to users or operators, but may appear in DB2 traces.

00F30572  Explanation:  This reason code is returned when a DB2 program attempts to SPECIFY a Program Request Handler (PRH) and there was one already active. The new specification overlays the older specification. This reason code is not normally visible to users or operators, but may appear in DB2 traces.

This DB2 reason code is issued by the following CSECT: DSN3SPRX

System Action:  The new specification replaces the old one.

00F30573  Explanation:  The invoker of DSN3SPRH specified an invalid value for a resource access list entry (RALE). The RALE is outside the limits of those supported by the application program support call routine that routes control to the program request handlers.

This abend reason code is issued by the following CSECT: DSN3SPRX

System Action:  The requester is abended, and the request is not processed.

Operator Response:  Notify the system programmer.

System Programmer Response:  If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination:  An SVC dump and associated SYS1.LOGREC entries are produced by a DB2 service. Register 2 at the entry to the abend contains the resource access list element (RALE) value passed.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 5.

00F30574  Explanation:  The invoker of DSN3SPRH specified an invalid request qualifier (QUAL) value. The QUAL is outside the limits of those supported by the application program support call routine that routes control to the program request handlers (PRHs).

This abend reason code is issued by the following CSECT: DSN3SPRX

System Action:  The requester is abended, and the request is not processed.

Operator Response:  Notify the system programmer.

System Programmer Response:  If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination:  An SVC dump and associated SYS1.LOGREC entry are produced by a DB2 resource manager. Register 2 at the entry to the abend contains the QUAL value passed.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 5.

00F30580  Explanation:  The DSN3CONN request for the EOM, first EOT or identify SSI call during the 'release-work' notification has resulted in a nonzero return code (see message DSN3580I).

This abend reason code is issued by the following CSECT: DSN3AM12

System Action:  The requester is abended.

Operator Response:  Notify the system programmer.

System Programmer Response:  If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination:  The original return and reason code appear in the DSN3580I message issued by DSN3AM12. An SVC dump and associated SYS1.LOGREC entries are produced by some DB2 resource manager.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 5.
00F30581

**Explanation:** CSECT DSN3AM2 found an unknown type of notify message in a message buffer. This is a DB2 subsystem error.

This abend reason code is issued by the following CSECT: DSN3AM2

**System Action:** An abend is issued, and the startup/shutdown ESTAE creates a SYS1.LOGREC entry and take an SVC dump.

**Operator Response:** Notify the system programmer, and restart DB2.

**System Programmer Response:** Examine the SYS1.LOGREC entries and SVC dumps. If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** The SVC dump that is produced contains the relevant material for problem analysis. These buffers are set up by DSN3CLOX.

Collect the following diagnostic items listed in Appendix B.

"Problem determination" on page 1051 1, 2, 5.

---

00F30597

**Explanation:** A protocol violation has been detected for an identify request. A noncoordinator identify request has been requested from a task that is not a subtask of the active coordinator. This occurs for protocols only where TCB hierarchy must be observed (SASS) and only when a coordinator has already identified itself to DB2.

This abend reason code is issued by the following CSECT: DSN3I3D30

**System Action:** The allied task is abended, and the request is not processed.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** An SVC dump may be produced by the allied address space.

Collect the following diagnostic items listed in Appendix B.

"Problem determination" on page 1051 1, 2, 5.

---

00F30598

**Explanation:** A protocol violation has been detected for an identify request. A noncoordinator identify request has been requested in a PSW key different from KEY of the active coordinator at its identify. This occurs only when a coordinator has already identified itself to DB2.

This abend reason code is issued by the following CSECT: DSN3I3D30

**System Action:** The allied task is abended, and the request is not processed.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** An SVC dump may be produced by the allied address space.

Collect the following diagnostic items listed in Appendix B.

"Problem determination" on page 1051 1, 2, 5.

---

00F30599

**Explanation:** The allied memory function of the subsystem support subcomponent (SSAM) has attempted to remove an AGNT block (representing a connected allied coordinator task) from the chain of active AGNT blocks before all the dependent AGNT blocks have been removed. This AGNT block would normally be removed only during SSAM terminate processing or during EOT processing for the coordinator task. However, in these cases, dependents are terminated bottom up, and this situation, if it occurs, is a serious one. This message probably represents a logic error in the subsystem support subcomponent’s allied memory function (SSAM).

This abend reason code is issued by the following CSECT: DSN3UNCH

**System Action:** The requesting SSAM module is abended. The connection name associated with the error is probably unable to continue communication with DB2 until DB2 is terminated and restarted.

**Operator Response:** Notify the system programmer. If necessary, stop and restart DB2.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** This is usually caused by a previous error that has created SYS1.LOGREC entries and requested an SVC dump. The SYS1.LOGREC entries and SVC dumps should be examined to determine the actual cause of the error.

Collect the following diagnostic items listed in Appendix B.

"Problem determination" on page 1051 1, 2, 5.

---

00F30601

**Explanation:** Asynchronous events occurred which caused the premature termination of the thread. The thread could not be recovered.

There may be other abends or messages concerning this allied user indicating what the asynchronous events were.

This abend reason code is issued by the following CSECTs:

DSN3I3D30 DSN3IA0 DSN3RI0

**System Action:** The allied user is abended with code X’04E’ and this reason code.

**Operator Response:** The system programmer should be notified.

**System Programmer Response:** An SVC dump associated SYS1.LOGREC entries and SYLOG should be available. If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B.

"Problem determination" on page 1051 1, 2, 5.
Explanation: CSECT DSN3AMT3 could not establish an ESTAE during the processing of an 'end stop-work force' notification. This can occur if the current address space (usually system services) has insufficient storage. This may lead to abnormal termination of DB2.

This abend reason code is issued by the following CSECT: DSN3AMT3

System Action: The caller is abended (without ABDUMP).

Operator Response: Notify the system programmer and, if necessary, restart DB2.

System Programmer Response: If necessary, increase the private area size of the failing address space.

Problem Determination: An SVC dump and related SYS1.LOGREC entry are requested by the initialization procedures (IP) subcomponent job-step task.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 5.

Explanation: The DB2 subsystem was abended by module DSNAPRHX. DSNAPRHX was called and the request was passed on to the DB2 subsystem. However, upon return, it was discovered that the requesting (calling) TCB was in a DB2 must-complete function or was still holding DB2 latches.

This abend reason code is issued by the following CSECT: DSNAPRHX

System Action: The DB2 subsystem is terminated. An MVS SVC dump is requested.

Operator Response: Notify the system programmer, and restart DB2.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: This is usually caused by a previous error that has created SYS1.LOGREC entries and requested an SVC dump. The SYS1.LOGREC entries and SVC dumps should be examined to determine the actual cause of the error.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 5.

Explanation: CSECT DSNAPRHX, on the return path (normal nonerror path) from the requested function, found that the FRBUDATA flag was on. This is a DB2 subsystem error.

This abend reason code is issued by the following CSECT: DSNAPRHX

System Action: The requesting task gets the FRB return and reason codes as set by the requested function. The task is not abended.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The SYS1.LOGREC entries and SVC dump should be examined to determine the actual cause of the error.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 5.

Explanation: CSECT DSNAPRHX could not establish its ESTAE during the processing of an application program support call. This can occur if the current address space has insufficient storage.

This abend reason code is issued by the following CSECT: DSNAPRHX

System Action: The allied task is abended (without ABDUMP).

Operator Response: Notify the system programmer.

System Programmer Response: The user may retry the request. If necessary, increase the private area size of the application address space.

Problem Determination: The allied task may have requested an SVC dump.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 5.

Explanation: The caller's connection with DB2 has been terminated, because the DB2 subsystem has terminated or is in the process of terminating abnormally.

This abend reason code is issued by the following CSECT: DSNAPRHX

System Action: The request may have been processed or aborted.

User Response: The requester may identify to DB2 when it becomes operational again.

Problem Determination: Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 5.

Explanation: DB2 has lost its cross-memory authority to an allied address space because the ally has released its authorization index.

This reason code is issued by the following CSECT: DSN3SES

System Action: The allied address space is terminated.

Operator Response: Notify the system programmer.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 5.
00F30902

Explanation:  DB2 has detected a recursive abend condition while processing end-of-task for a task in an allied address space.

This reason code is issued by the following CSECT: DSN3SSES

System Action:  The allied address space is terminated.

Operator Response:  Notify the system programmer.

System Programmer Response:  If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B.  "Problem determination" on page 1051  1, 5

00F30903

Explanation:  An abend has occurred while processing End-of-Task for the control address space or a resource manager address space.

This reason code is issued by the following CSECT: DSN3SSES

System Action:  The address space is forced to end-of-memory with this reason code.

Operator Response:  Notify the system programmer.

System Programmer Response:  If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B.  "Problem determination" on page 1051  1, 5

00F30904

Explanation:  End-of-Task occurred for the control address space or a resource manager address space and DB2 could not establish an ESTAE to protect its processing.  Insufficient storage may be the reason the ESTAE could not be established.

This reason code is issued by the following CSECT: DSN3SSI1

System Action:  The address space is forced to end-of-memory with this reason code.

Operator Response:  Notify the system programmer.

System Programmer Response:  If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B.  "Problem determination" on page 1051  1, 5

Problem Determination:  Attempt to determine if one or more DB2 address spaces is storage-constrained.  Examination of the console output for the time period preceding this condition may reveal other messages or indications that the terminating address space was storage-constrained.

00F30905

Explanation:  End-of-Task occurred for the job step task in an allied address space.  DB2 would normally attempt to terminate the address space’s connection to DB2 but was unable to protect its processing by establishing an ESTAE.  Insufficient storage may be the reason the ESTAE could not be established.

This reason code is issued by the following CSECT: DSN3SSI1

System Action:  The address space is forced to end-of-memory with this reason code.

Operator Response:  Notify the system programmer.

System Programmer Response:  If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix B.  "Problem determination" on page 1051  1, 5

Problem Determination:  Attempt to determine if one or more allied address spaces is storage-constrained.  Examination of the console output for the time period preceding this condition may reveal other messages or indications that the terminating allied address space was storage-constrained.

00F33100

Explanation:  The DB2 thread is ‘read-only’.

This reason code is issued by the following CSECT: DSN3PR00

System Action:  A prepare issued by the application program was processed through Phase 1.  DB2 discovered there were no resources modified and no need for commit or abort to be subsequently issued.

User Response:  May effect a path length savings by not issuing the subsequent commit or abort which normally follows prepare.  No further action is required to complete the unit of recovery; the unit of recovery is complete.

00F3AFFFF

Explanation:  An unrecoverable error return code was received from the RACROUTE REQUEST=VERIFY macro service.  The return code was other than 0, 4, or 8.

This abend reason code is issued by the following CSECT: DSN3@SGN

System Action:  The SIGNON request is abended.  An SVC dump is requested by DB2 functional recovery.

Operator Response:  Notify the system programmer.

System Programmer Response:  If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination:  The abend with this reason code is issued by the sample SIGNON exit after the implementation in the user’s installation.  It indicates that an unrecoverable error occurred with the RACROUTE REQUEST=VERIFY macro service.

GPR 2 at the time of abend will contain the original RACROUTE return code from GPR 15.  GPR 3 at the time of abend will contain the reason code returned by the RACROUTE macro service in GPR 0, if any.
Refer to *Resource Access Control Facility (RACF) System Programmer's* for descriptions of the RACROUTE return and reason codes.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 5.
X'F7......' Codes

00F70001
Explanation: DB2 could not find the system parameters CSECT DSN6GRP.
System Action: The DB2 subsystem terminates.
Operator Response: Restart DB2 with the correct system parameters load module. If the problem reoccurs, notify the system programmer.
System Programmer Response: Investigate the system parameters load module.
Problem Determination: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
This code is issued by the following CSECT: DSN7SINI

00F70002
Explanation: DB2 data sharing was requested, but MVS was not at the required level. You must use MVS Version 5 Release 1.0 or a later release.
System Action: The DB2 subsystem terminates.
Operator Response: Restart DB2 on a system with MVS Version 5 Release 1.0 or a later release.
Problem Determination: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
This code is issued by the following CSECT: DSN7SINI

00F70003
Explanation: The DB2 subsystem parameters specified that data sharing should be active. DB2 startup checking failed for either of two reasons:
- The group and member names contained in the subsystem parameters are not equal to the group and member names contained in the DB2 ssnmMSTR JCL start procedure, or
- The DB2 member is already active on another MVS system.
System Action: DB2 terminates.
Operator Response: Make sure the correct subsystem parameter load module name was specified for the DB2 that failed to start. Restart DB2 with the correct subsystem parameter name.
System Programmer Response: Make sure the subsystem parameter name specified is the correct one for the DB2 subsystem and is not for a different member or group. You cannot share subsystem parameters among the members of a data sharing group. Make sure the group and member names specified in the subsystem parameters are equal to the group and member names contained in the DB2 ssnmMSTR JCL start procedure.
Problem Determination: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
This code is issued by the following CSECT: DSN7SINI

00F70004
Explanation: DB2 could not find the system parameters CSECT DSN6GRP.
System Action: The DB2 subsystem terminates.
Operator Response: Restart DB2 with the correct system parameters load module. If the problem reoccurs, notify the system programmer.
System Programmer Response: Investigate the system parameters load module.
Problem Determination: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
This code is issued by the following CSECT: DSN7GCHK

00F7001
Explanation: DB2 could not find the system parameters CSECT DSN6GRP.
System Action: The DB2 subsystem terminates.
Operator Response: Restart DB2 with the correct system parameters load module. If the problem reoccurs, notify the system programmer.
System Programmer Response: Investigate the system parameters load module.
Problem Determination: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
This code is issued by the following CSECT: DSN7GINI

00F7002
Explanation: DB2 could not create a service task for the group basic services function.
System Action: The DB2 subsystem terminates.
Problem Determination: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
This code is issued by the following CSECT: DSN7GCTK

00F7003
Explanation: DB2 could not find the system parameters CSECT DSN6SPRM.
System Action: The DB2 subsystem terminates.
Operator Response: Restart DB2 with the correct system parameters load module. If the problem reoccurs, notify the system programmer.
System Programmer Response: Investigate the system parameters load module.
Problem Determination: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
This code is issued by the following CSECT: DSN7GCHK

00F7004
Explanation: DB2 could not open the SCA member information record.
System Action: DB2 terminates.
Operator Response: Check if the CF SCA structure is allocated. Restart DB2. If the problem occurs again, notify the system programmer.
System Programmer Response: Check if correct policy is active.
Problem Determination: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.
This code is issued by the following CSECT: DSN7GCHK
Explanation: DB2 encountered an unexpected error while trying to read from or write to the shared communications area (SCA).

System Action: The requesting execution unit abends. A SYS1.LOGREC entry is written and an SVC dump is requested.

Problem Determination: Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

This abend reason code is issued by the following CSECT: DSN7GJON, DSN7GRMA.

Explanation: DB2 issued an XCF macro IXQUERY, but it failed. (XCF is the cross-system coupling facility component of MVS.)

System Action: The DB2 subsystem terminates.

Operator Response: Check the MVS console for XCF-related error messages. Issue an MVS DISPLAY XCF,GROUP command to ensure that XCF is functional. Then try to restart the DB2 subsystem. If the problem reoccurs, notify the system programmer.

System Programmer Response: Investigate the reason for this unexpected error. Refer to MVS/ESA Programming: Sysplex Services Reference for information about XCF return and reason codes.

Problem Determination: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

This code is issued by the following CSECT: DSN7GJON

Explanation: DB2 issued an XCF macro IXCJOIN request, but it failed. (XCF is the cross-system coupling facility component of MVS.)

System Action: The DB2 subsystem terminates.

Operator Response: Check the MVS console for XCF-related error messages. Issue an MVS DISPLAY XCF,GROUP command to ensure that XCF is functional. Then try to restart the DB2 subsystem. If the problem reoccurs, notify the system programmer.

System Programmer Response: Investigate the reason for this unexpected error. Refer to MVS/ESA Programming: Sysplex Services Reference for information about XCF return and reason codes.

Problem Determination: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

This code is issued by the following CSECT: DSN7GJON

Explanation: DB2 encountered an unexpected error while trying to read from or write to the local bootstrap data set (BSDS).

System Action: The requesting execution unit abends. A SYS1.LOGREC entry is written and an SVC dump is requested.

Problem Determination: Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

This abend reason code is issued by the following CSECT: DSN7GJON

Explanation: DB2 detected an unexpected error during deletion of a DB2 service task.

System Action: DB2 terminates.

Problem Determination: Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

This abend reason code is issued by the following CSECT: DSN7GJON

Explanation: DB2 detected an unexpected error during IRLM locking.

System Action: DB2 terminates.

Problem Determination: Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

This abend reason code is issued by the following CSECT: DSN7GJON

Explanation: The connection to the shared communications area (SCA) was lost.

System Action: DB2 terminates because DB2 data sharing cannot function without the SCA.

User Response: Notify the system programmer.

System Programmer Response: Figure out why the SCA link to this central processor complex (CPC) is lost and correct the problem. Then restart DB2.

Problem Determination: If there is an active SFM policy which specifies that a rebuild of the SCA should occur, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

This code is issued by the following CSECT: DSN7LST3
**00F70601**

**Explanation:** The shared communications area (SCA) structure failed. DB2 initiated dynamic rebuild of the structure. However, the rebuild process failed and DB2 cannot continue without the SCA.

**System Action:** DB2 terminates.

**User Response:** Notify the system programmer.

**System Programmer Response:** Correct the SCA structure and restart DB2. If all DB2s in the group terminate with this code, the next DB2 restart might do a group restart.

**Problem Determination:** This code is issued by the following CSECTs: DSN7LST2, DSN7LST3.

---

**00F70602**

**Explanation:** DB2 cannot connect to the shared communications area (SCA) coupling facility structure.

**System Action:** Because DB2 data sharing cannot function without the SCA, DB2 terminates.

**User Response:** Notify the system programmer.

**System Programmer Response:** Refer to message DSN7506I for more information.

**Problem Determination:** This abend reason code is issued by the following CSECTs: DSN7LSTK, DSN7LST2.

---

**00F70603**

**Explanation:** DB2 encountered an error in accessing the shared communications area (SCA) coupling facility structure.

**System Action:** Since DB2 data sharing cannot function without the SCA, DB2 terminates.

**User Response:** Notify the system programmer.

**System Programmer Response:** Refer to message DSN7508I for more information.

**Problem Determination:** This code is issued by the following CSECTs: DSN7LRE1, DSN7LR01, DSN7LWR1, DSN7LDE1

---

**00F70604**

**Explanation:** DB2 cannot rebuild the shared communications area (SCA) coupling facility structure.

**System Action:** Because DB2 data sharing cannot function without the SCA, DB2 terminates.

**User Response:** Notify the system programmer.

**System Programmer Response:** Refer to messages DSN7506A and DSN7508I for more information.

**Problem Determination:** This abend reason code is issued by the following CSECT: DSN7LSTK

---

**00F70605**

**Explanation:** DB2 cannot create a needed service task. This is a DB2 internal error.

**System Action:** DB2 terminates.

**User Response:** Notify the system programmer.

**System Programmer Response:** Investigate the problem.

**Problem Determination:** Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

This abend reason code is issued by the following CSECT: DSN7LCTK

---

**00F70606**

**Explanation:** DB2 detected an unexpected error. This is a DB2 internal error.

**System Action:** DB2 terminates.

**User Response:** Notify the system programmer.

**System Programmer Response:** Investigate the problem.

**Problem Determination:** Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem. This abend reason code is issued by the following CSECTs: DSN7LUS, DSN7LEST.

---

**00F70607**

**Explanation:** DB2 detected that the shared communications area (SCA) coupling facility structure reached the directory entry limit of 200.

**System Action:** DB2 terminates because DB2 data sharing cannot function without the SCA.

**User Response:** Notify the system programmer.

**System Programmer Response:** Investigate the problem.

**Problem Determination:** Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

This abend reason code is issued by the following CSECT: DSN7LOP1

---

**00F70608**

**Explanation:** DB2 detected an unexpected error. This is a DB2 internal error.

**System Action:** DB2 terminates.

**User Response:** Notify the system programmer.

**System Programmer Response:** Investigate the problem.

**Problem Determination:** Refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem. This abend reason code is issued by the following CSECTs: DSN7LOP1, DSN7LUTL.
00F70609

Explanation: The SCA structure is full.

System Action: The DB2 that was writing an entry in the SCA terminates since the critical function cannot go on without the SCA entry written.

System Programmer Response: Refer to DB2 Data Sharing: Planning and Administration for a full description of actions in the SCA full scenario section.

Problem Determination: Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051.

This abend reason code is issued by the following CSECT: DSN7LWRI
X’F9......’ Codes

An entry in the SYS1.LOGREC data set is requested for all of the following abnormal termination conditions. The SDWA variable recording area (VRA) contains the information provided by the DSNWRCRD function. When VRA space permits, the recordable section of the diagnostic data table (DDT control block) is also placed in the VRA. If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

All general command processor modules use register 10 as a base register. This may be helpful when attempting to match a register value to a module map.

**00F90000**

**Explanation:** A command processor has been invoked via the application program support function while the local lock of the caller’s address space was held. CSECT DSN9SCNF tried to obtain the lock in order to obtain a response message buffer, but it was unable to do so. This represents a logic error in the function that submitted the command to the application program support function.

This abend reason code is issued by the following CSECT: DSN9SCNF

**System Action:** Command execution was abended. If the command was properly entered, it may have been partially or completely executed.

**Operator Response:** Print the contents of the SYS1.LOGREC data set. If a dump was produced, have it printed. It may be necessary to restart the attachment (IMS or CICS).

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The diagnostic data table (DDT control block) appears in the SDWA variable recording area (VRA). For additional diagnostic information, see X’F9......’ Codes.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2, 5.

**00F90002**

**Explanation:** The routines of the multiple console support (MCS) service of MVS were unable to initialize. CSECT DSN9SCNM attempted to create the console task controller service task, but the task was not successfully created. This condition may indicate a problem in the address space. If it occurs, this is a serious error.

This abend reason code is issued by the following CSECT: DSN9SCNM

**System Action:** Subsystem initialization is aborted, causing the DB2 subsystem to terminate.

**Operator Response:** Print the contents of the SYS1.LOGREC data set. If a dump was produced, have it printed. Restart the DB2 subsystem.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

**Problem Determination:** The diagnostic data table (DDT control block) appears in the SDWA variable recording area (VRA). For additional diagnostic information, see X’F9......’ Codes.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2, 5.

**00F90003**

**Explanation:** The routines of the multiple console support (MCS) service of MVS were unable to initialize. CSECT DSN9SCNM or DSN9SCN6 attempted to create a console service task but the task was not successfully created. This condition, if it occurs, is a serious one.

This abend reason code is issued by the following CSECTs: DSN9SCN6, DSN9SCNM

**System Action:** If the abend was issued by CSECT DSN9SCNM, DB2 subsystem initialization is aborted, causing the DB2 subsystem to terminate. If the abend was issued by CSECT DSN9SCN6, the command from the associated console is executed under a different service task and should proceed normally.

**Operator Response:** Print the contents of the SYS1.LOGREC data set. If a dump was produced, have it printed.
System Programmer Response: If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** The diagnostic data table (DDT control block) appears in the SDWA variable recording area (VRA). For additional diagnostic information, see **X’F9......** Codes on page 1005.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2, 5.

---

**00F90004**

**Explanation:** The routines of the multiple console support (MCS) service of MVS detected a logic error. CSECT DSN9SCN7 received a return code from the command preprocessor (the DSN9CMD service) that indicated an intolerable condition. A return code of X’04’ is issued if the DSN9CMD calling parameters are invalid (the command text length is not a positive number or the PHB address is zero).

A return code of X’24’ is provided if storage for a tokenized command statement (TCS) cannot be obtained from the global storage pool obtained by CSECT DSN9SCNP. The TCS storage request is the first storage request made using this pool. This is not a user error.

This abend reason code is issued by the following CSECT: DSN9SCN7

**System Action:** The command was not executed.

**Operator Response:** Print the contents of the SYS1.LOGREC data set. If a dump was produced, have it printed. It may be necessary to restart the attachment (IMS or CICS) or the DB2 subsystem.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** The diagnostic data table (DDT control block) appears in the SDWA variable recording area (VRA). For additional diagnostic information, see **X’F9......** Codes on page 1005.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2, 5.

---

**00F90005**

**Explanation:** A routine of the multiple console support (MCS) service of MVS was not able to allocate command processing capability to an agent. This failure occurs, because there is a damaged control block in global storage (CSA). The control block is the command global data area (CGDA). The address of the CGDA is in the general command processor RMFTRUSE field. This is not a user error.

This abend reason code is issued by the following CSECT: DSN9SCNB

**System Action:** Agent allocation is terminated.

**Operator Response:** Print the contents of the SYS1.LOGREC data set. If a dump was produced, have it printed. For additional diagnostic information, see **X’F9......** Codes on page 1005.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2, 5.

---

**00F90006**

**Explanation:** The agent allocation routine was not able to allocate command processing capability to an agent. This failure occurs, because there is a damaged control block in global storage (CSA). The control block is the command global data area (CGDA). The address of the CGDA is in the general command processor RMFTRUSE field. This is not a user error.

This abend reason code is issued by the following CSECT: DSN9SCNB

**System Action:** The command was not executed.

**Operator Response:** Print the contents of the SYS1.LOGREC data set. If a dump was produced, have it printed. It may be necessary to restart the attachment (IMS or CICS) or the DB2 subsystem.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** The diagnostic data table (DDT control block) appears in the SDWA variable recording area (VRA). For additional diagnostic information, see **X’F9......** Codes on page 1005.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2, 5.

---

**00F90007**

**Explanation:** The command parsing routines have attempted to update one of the command statistical counters that are kept in local storage. However, the counter control block validation field is wrong, indicating a damaged control block. The counter control block is located via the ‘CGDASTA’ address in the command global data area (CGDA) control block. The CGDA address is in the general command processor RMFTRUSE field. This is not a user error.

This abend reason code is issued by the following CSECT: DSN9SCN2

**System Action:** The statistical update is not completed. The statistics block address is cleared from the CGDA to prevent future failures. No further command statistical counts are maintained. Processing for the command is retried and should complete normally.

**Operator Response:** Print the contents of the SYS1.LOGREC data set. If a dump was produced, have it printed.

**System Programmer Response:** If you suspect an error in DB2, refer to Section 3 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

**Problem Determination:** The diagnostic data table (DDT control block) appears in the SDWA variable recording area (VRA). For additional diagnostic information, see **X’F9......** Codes on page 1005.

Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 2, 5.
00F90008

Explanation: The recovery manager control routine has been called, but register 6 did not contain the address of an execution block (EB) on entry to DSN9SCN9. Because recovery logic requires the address of the EB, CSECT DSN9SCN9 cannot proceed. The EB hexadecimal control block identifier and the block length are compared to known values in order to validate the EB address. This is not a user error.

This abend reason code is issued by the following CSECT: DSN9SCN9

System Action: The function requesting the recovery management service is abended.

Operator Response: Print the contents of the SYS1.LOGREC data set. If a dump was produced, have it printed. It may be necessary to restart the attachment (IMS or CICS) or the DB2 subsystem.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The diagnostic data table (DDT control block) appears in the SDWA variable recording area (VRA). For additional diagnostic information, see X'F9......'.

Collect the following diagnostic items listed in Appendix B.

"Problem determination" on page 1051: 1, 2, 5.

00F90009

Explanation: This reason code is used to document that CSECT DSN9SCN9 has added information to the SDWA variable recording area (VRA) following the data provided by the DSNWRCRD service. If DSN9SCN9 records a failure in SYS1.LOGREC and the reason code in the VRA is not of the form X'00F9xxxx', the reason code is changed to X'00F99009'. This is done so that anyone examining a SYS1.LOGREC entry can determine, from the reason code, what additional information has been placed. The reason code is the first data item in the VRA, as mapped by macro IHAVRA.

This abend reason code is issued by the following CSECT: DSN9SCN9

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The diagnostic data table (DDT control block) appears in the SDWA variable recording area (VRA). For additional diagnostic information, see X'F9......'.

Collect the following diagnostic items listed in Appendix B.

"Problem determination" on page 1051: 1, 2, 5.

00F9000A

Explanation: The command parsing routines attempted to obtain a descriptor using the DSNZGDE service of the system parameter manager but the expected descriptor was not found (the DSNZGDE return code was X'04'). All descriptors used by the parser are contained in CSECT DSN9SCNA. This failure probably indicates incorrect data in CSECT DSN9SCNA.

This abend reason code is issued by the following CSECTs:

<table>
<thead>
<tr>
<th>DSN9SCN4</th>
<th>DSN9SCN2</th>
<th>DSN9SCN1</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Action: Command execution was abended. The command was not executed.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operator Response: Print the contents of the SYS1.LOGREC data set. If a dump was produced, have it printed. It may be necessary to restart the attachment (IMS or CICS) or the DB2 subsystem.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Problem Determination: The diagnostic data table (DDT control block) appears in the SDWA variable recording area (VRA). For additional diagnostic information, see X'F9......'.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Codes on page 1005</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&quot;System determination&quot; on page 1051: 1, 2, 5.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

00F9000B

Explanation: The command parsing routines attempted to obtain storage from the storage pool (PHB) provided on a DSN9SCAN service request. Normally, this is CSA storage in the pool built by CSECT DSN9SCNP. The storage request could not be satisfied, either because no CSA storage was available or because an unreasonably large amount of storage was requested. The amount of storage requested is determined by the length of the command being parsed. Normally, it is several hundred bytes.

This abend reason code is issued by the following CSECT: DSN9SCN0

System Action: Command execution is abended.

Operator Response: Print the contents of the SYS1.LOGREC data set. If a dump was produced, have it printed. It may be necessary to restart the attachment facility (IMS or CICS) or the DB2 subsystem.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The diagnostic data table (DDT control block) appears in the subsystem diagnostic work area (SDWA) variable recording area (VRA). Register 8 contains the address of the tokenized command statement (TCS) control block, and register 9 contains the requested storage length. The TCS is the DB2 internal representation of the command text. For additional diagnostic information, see X'F9......'.

Collect the following diagnostic items listed in Appendix B.

"Problem determination" on page 1051: 1, 2, 5.

00F9000C

Explanation: The command preprocessor (GCPC) mainline routine (DSN9SCNP) encountered a validation error when examining the message chains returned from the command processor.

The command processor invoked attempted to return a message formatted for inclusion in an MVS Multiple Line WTO.

This abend reason code is issued by the following CSECT: DSN9SCNP

System Action: Command execution is abended.
Operator Response: Notify the system programmer.

System Programmer Response: This error reflects a failure identified during DB2 internal protocol verification. The command in error is identified by message DSN9017I. Register 8 points to the start of the response message chain returned by the command processor. Register 9 points to the message within the message chain that was found to be in error.

System Programmer Response: If you suspect an error in DB2, refer to Section 3 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem Determination: The GCPC Diagnostic Data Table (DSNDDDT Control Block) is recorded in the Variable Recording Area of the SDWA associated with the error.

Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051: 1, 2, 5.

00F9000D

Explanation: The command preprocessor (GCPC) start-up routine (DSN9SCNE) discovered that the ERLY block is out-of-date. This error indicates that the current early code is not yet compatible with this version of DB2; a required early code PTF is missing.

This abend reason code is issued by the following CSECT: DSN9SCNE

System Action: The DB2 subsystem start-up is terminated.

Operator Response: Notify the system programmer.

System Programmer Response: Check the Program Directory, apply the required early code PTF and re-IPL MVS.
## Section 5. IRLM Messages and Codes

<table>
<thead>
<tr>
<th>IRLM Messages and Codes</th>
<th>page</th>
</tr>
</thead>
<tbody>
<tr>
<td>IRLM messages</td>
<td>1011</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IRLM Error Return and Reason Codes</th>
<th>page</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHANGE request</td>
<td>1025</td>
</tr>
<tr>
<td>IDENT request</td>
<td>1027</td>
</tr>
<tr>
<td>LOCK request</td>
<td>1028</td>
</tr>
<tr>
<td>NOTIFY request</td>
<td>1030</td>
</tr>
<tr>
<td>PLEXIT request</td>
<td>1031</td>
</tr>
<tr>
<td>PURGE request</td>
<td>1031</td>
</tr>
<tr>
<td>QUERY request</td>
<td>1032</td>
</tr>
<tr>
<td>QUIT request</td>
<td>1032</td>
</tr>
<tr>
<td>RETLOCK request</td>
<td>1033</td>
</tr>
<tr>
<td>STAT request</td>
<td>1033</td>
</tr>
<tr>
<td>SYNC request</td>
<td>1033</td>
</tr>
<tr>
<td>TAKEOVER request</td>
<td>1034</td>
</tr>
<tr>
<td>UNLOCK request</td>
<td>1034</td>
</tr>
<tr>
<td>VERIFY request</td>
<td>1035</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IRLM Abend Reason Codes</th>
<th>page</th>
</tr>
</thead>
</table>

© Copyright IBM Corp. 1982, 1999
IRLM Messages and Codes

This section describes all messages, error return and reason codes, and abend reason codes issued by the internal resource lock manager (IRLM). The database management system (DBMS) referred to throughout the messages and codes is either DB2 or IMS. Some messages and codes do not apply to DB2 operations.

IRLM messages

This section describes messages for the resource lock manager (IRLM) subcomponent.

The messages have the form of DXRxxxxa and are listed in numeric order.

DXR The prefix for IRLM messages.

xxx The numeric part of the message.

a An alphabetic suffix, as follows:

I The message is for information only.

E The message reports an error condition which might require action.

A Action is required of the user before processing can continue.

IRLM will now direct messages in two ways:

1. If a UN-solicited message is to be issued, the target "console" will be the one in which IRLM was started from.

2. If a solicited message is to be issued, i.e. via "F IRLM,STATUS" opercmd, it will automatically be directed back to the console from which the modify was accepted. Even if it was a TSO session running SDSF.

All messages contain the issuing IRLM subsystem name and ID, irlmx where, irlmx is the concatenation of the IRLMNM and IRLMID specified as EXEC parameters when the IRLM was started, as shown below.

<table>
<thead>
<tr>
<th>CLASS</th>
<th>TYPE</th>
<th>SEGS</th>
<th>MEM</th>
<th>TYPE</th>
<th>SEGS</th>
<th>MEM</th>
<th>TYPE</th>
<th>SEGS</th>
<th>MEM</th>
</tr>
</thead>
</table>

Figure 2. Format of irlmx

If IRLMNMM='KRLM' and IRLMID='12' then irlmx='KRLM012'

If IRLMNMM='LRLM' and IRLMID='0' then irlmx='LRLM000'

The IRLMID is displayed as three characters in the messages.

Explaination: This message is issued in response to the following command:

F irlmproc,STATUS,STOR

A brief summary of selected storage usage is displayed where:

pc the parameter as specified in the irlmproc. Its value is either YES or NO.

csa the value displayed when the PC parameter is NO. This represents the value of MAXCSA that is currently in effect as xxxM for megabytes. It is set initially with the MAXCSA parameter in the IRLM start up procedure and can be modified with the IRLM modify command "F irlmproc,SET,CSA=" (see IRLM MODIFY command in the command reference manual)

hash valid only when SCOPE=GLOBAL or NODISCON. The number of Lock Hash entries in units of 1048576, available in the Coupling Facility the last time this IRLM was connected to the group. If less than 1 unit, the value will be zero. It may be set initially with the HASH parameter in the irlmproc and can be modified with the IRLM modify command "F irlmproc,SET,HASH=" (see IRLM MODIFY command in the command reference manual)

rle valid only when SCOPE=GLOBAL or NODISCON. The number of Record List Entries available in the Coupling Facility at the time the MODIFY command is issued. If the IRLM is DISCONNECTED from the CF, this number represents those in use when last updated prior to DISCONNECT.

reus valid only when SCOPE=GLOBAL or NODISCON. The number of RLE that were in use in the Coupling Facility at the time the MODIFY command is issued. If the IRLM is DISCONNECTED from the CF, this number represents those in use when last updated prior to DISCONNECT.

acnt is the current CSA + ECSA usage for lock control structures. This storage is called "accountable" because it is accountable against the MAXCSA value. Its value is specified as either xxxK for kilobytes or xxxM for megabytes. When PC=YES, this value will be 0K.
ahwm is the High Water Mark or greatest amount of CSA + ECSA allocated by IRLM during this initialization period for lock control structures. Its value is specified as either xxxK for kilobytes or xxxM for megabytes. When PC=YES this value will be 0K.

cur is the current CSA + ECSA usage. Its value is specified as either xxxK for kilobytes or xxxM for megabytes.

hwm is the High Water Mark or greatest amount of CSA + ECSA allocated by IRLM during this initialization period. Its value is specified as either xxxK for kilobytes or xxxM for megabytes.

segabove the number of IRLM control block segments above 16M. Its value is the number of control block segments.

storabove the storage allocated to the segments in segabove. Its value is the storage allocation specified as either xxxK for kilobytes or xxxM for megabytes.

segbelow the number of IRLM control block segments below 16M. Its value is the number of control block segments.

storbelow the storage allocated to the segments in segbelow. Its value is the storage allocation specified as either xxxK for kilobytes or xxxM for megabytes.

class specifies the category of storage. These are: *ACCNT*, *PROC*, and *MISC*. *ACCNT* describes the storage allocated to IRLM lock control blocks. *PROC* describes the storage allocated to IRLM structures used for IRLM processing (including requests). This storage includes CSA, ECSA, and IRLM private storage. *MISC* describes the storage allocated for the rest of IRLM's needs. This includes trace buffers and other diagnostic structures. This storage includes CSA, ECSA, and IRLM private storage.

type specifies the sub-category for CLASS. For example, T-1 is storage for resource block structures; T-2 is storage for resource request structures, and T-3 is storage for requestor structures. The storage for types T-1, T-2, and T-3 is allocated from ECSA when PC=NO or IRLM private storage when PC=YES.

segs the number of storage segments allocated

mem the storage specified as either xxxK for kilobytes or xxxM for megabytes.

N/A the value displayed when the PC parameter is YES.

The following is sample output when the parameter PC = NO:

```
DXR1001JR21193STORSTATS
PC: NO MAXCSA: 6M HASH: 16M RLE: 231410 RLEUSE: 20
ABOVE 16M: 72 4033K BELOW 16M: 6 15K
CLASS TYPE SEGS MEM TYPE SEGS MEM TYPE SEGS MEM
ACCNT T-1 1 64K T-2 1 64K T-3 1 4K
PROC WRK 11 58K SRB 3 3K OTH 2 2K
MISC VAR 60 4081K N-V 6 22K FIX 1 24K
```

The following is sample output when the parameter PC = YES:

```
DXR1001JR21192STORSTATS
PC: YES MAXCSA: N/A HASH: 16M RLE: 231410 RLEUSE: 20
ABOVE 16M: 78 4308K BELOW 16M: 44 53K
CLASS TYPE SEGS MEM TYPE SEGS MEM TYPE SEGS MEM
ACCNT T-1 1 64K T-2 1 64K T-3 1 4K
PROC WRK 11 58K SRB 41 41K OTH 2 2K
MISC VAR 68 4497K N-V 6 22K FIX 1 24K
```

System Action: Processing continues normally.

```
DXR101I iirlmxx STATUS SCOPE=nnnnnn SUBSYSTEMS IDENTIFIED
Module:
NAME STATUS UNITS HELD WAITING RET_LKS
ssname zzz wun reh rew rtlks
```

Explanation: This message is issued in response to the following command:

```
F iirlmproc,STATUS
```

A list of DBMSs identified to the IRLM is displayed. Work unit and lock information is displayed for each DBMS.

The message variables are:

```
nnnnn One of the following:
LOCAL SCOPE=LOCAL was specified as an EXEC parameter when the IRLM was started.
GLOBAL SCOPE=GLOBAL was specified in the IRLMPROC and the IRLM is connected to a data sharing group.
DISCON SCOPE=GLOBAL or SCOPE=NODISCON was specified in the IRLMPROC and the IRLM is not connected to a data sharing group.
NoDISC SCOPE=NODISCON was specified in the IRLMPROC and the IRLM is connected to a data sharing group.
GINIT SCOPE=GLOBAL was specified in the IRLMPROC and the IRLM is joining a data sharing group.
GTERM SCOPE=GLOBAL was specified in the IRLMPROC and the IRLM is terminating from a data sharing group.
```

ssname An eight-character DBMS name.

```
zzz One of the following:
UP The DBMS is active.
DOWN The DBMS failed.
UP-RO The DBMS subsystem is active and is currently identified to the IRLM as a 'read-only' subsystem.
UP-NS The DBMS subsystem is active and is currently identified to the IRLM as a 'no-share' subsystem.
CLEANUP The IRLM drove the DBMS STATUS exit, indicating a failure condition, and is waiting for that DBMS to respond with a PURGE, indicating cleanup is complete.
```

1012 Messages and Codes
SFAIL  The IRLM to which the DBMS is identified disconnected from the data sharing group. The modify locks for all the subsystems on that IRLM were retained by IRLM. All DBMSs that are identified to IRLMs disconnected from a data sharing group are listed as SFAIL by the surviving IRLMs.

wun  The number of work units under the DBMS that are holding or waiting for a lock. No work units exist for a failed DBMS. The field is set to '...' for a failed DBMS.

reh  The number of resources locked by the DBMS.

rew  The number of waiting lock requests. No waiting requests are permitted for a failed DBMS. The field is set to '...' for a failed DBMS.

rtlks  The number of retained locks held by a subsystem that failed or was running on an IRLM that failed. In most cases, retained locks are purged when a DBMS reidentifies to IRLM; therefore, the number is zero for active DBMSs. However, it is possible for a DBMS to hold both active and retained locks if it is recovering from a previous failure. If no DBMSs are identified to this IRLM, the line beginning with ssname is replaced with NO INFORMATION AVAILABLE.

System Action:  Processing continues normally.

DXR103I  inrmx STATUS SUBSYSTEMS IDENTIFIED

Module:

<table>
<thead>
<tr>
<th>XNAME</th>
<th>STATUS</th>
<th>XRET-LKS</th>
<th>IRLMID</th>
<th>IRLM_NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>ssname</td>
<td>zzz</td>
<td>rtlks</td>
<td>id</td>
<td>iname</td>
</tr>
</tbody>
</table>

Explanation:  This message is issued in response to the following commands:
F irlmproc,STATUS,ALLD
F irlmproc,STATUS,inrmx
where inrmx is the IRLMX + IRLMID fields as specified in the IRLMPROC whose status is requested.

A list of DBMSs identified to the IRLMs in the data sharing group is displayed.

The message variables are:

ssname  An 8-character DBMS name.

zzz  One of the following:

UP  The DBMS is active.
DOWN  The DBMS failed.
UP-RO  The DBMS subsystem is active and is currently identified to the IRLM as a 'read-only' subsystem.
UP-NS  The DBMS subsystem is active and is currently identified to the IRLM as a 'no-share' subsystem.

System Action:  Processing continues normally.

DXR103I  inrmx STATUS IRLMS PARTICIPATING IN DATA SHARING GROUP FUNCTION LEVEL  glv

Module:

<table>
<thead>
<tr>
<th>IRLM-NAME</th>
<th>IRLMID</th>
<th>STATUS</th>
<th>LEVEL</th>
<th>SERVICE</th>
<th>MIN_LEVEL</th>
<th>MIN_SERVICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>iname</td>
<td>id</td>
<td>zzz</td>
<td>lv</td>
<td>s</td>
<td>mlv</td>
<td>ms</td>
</tr>
</tbody>
</table>

Explanation:  This message displays the active IRLMs in response to the following command:
F irlmproc,STATUS,ALLI

A list of IRLMs in the group that are actively data sharing is displayed. If not data sharing, the single IRLM is displayed.

glv  The IRLM function level in use by all the IRLM(s) in the data sharing group.

iname  A 4-character IRLM name.

id  The ID of the IRLM.

zzz  One of the following:

UP  The IRLM is active.
DOWN  The IRLM failed.

lv  The current IRLM function level.

s  The IRLM service or release that corresponds to the function level given in lv.

mlv  The minimum IRLM function level this IRLM can coexist with.

ms  The IRLM service or release that corresponds to the function level given in mlv.

System Action:  Processing continues normally.
DXR104I  *irmx* MAINTENANCE LEVELS
Explanation:  This display is produced by the MODIFY *irmxproc*,STATUS,MAINT command. Maintenance levels of all IRLM load modules except DXRRL183, DXRRLFTB, DXRRLM50, and DXRRRL186 are displayed to the console in two column format, showing the most recent APAR level and the compile date applied to each csect.
System Action:  IRLM processing continues normally.
Operator Response:  Review the maintenance level for any suspected module error or as requested by the IBM Support Center.
System Programmer Response:  none

DXR105E  *irmx* STOP COMMAND REJECTED. AN IDENTIFIED SUBSYSTEM IS STILL ACTIVE
Explanation:  A STOP *irmxproc* command was entered, but the IRLM still has active DBMSs identified.
System Action:  The command is not processed, but IRLM processing continues normally.
Operator Response:  Reenter the STOP command after all active DBMSs have terminated, or terminate the IRLM abnormally with the *F irmxproc*,ABEND command.

DXR106E  *irmx* INVALID MODIFY COMMAND PARAMETER SPECIFIED
Explanation:  A MODIFY command specified the procedure name of this IRLM, but the command either contained parameter values not supported by the IRLM or did not contain a required parameter.
System Action:  The command is not processed, but IRLM processing continues normally.
Operator Response:  Reenter the MODIFY command with the correct parameters.

DXR107E  *irmx* STORAGE NOT AVAILABLE TO PROCESS THIS COMMAND
Explanation:  The IRLM cannot obtain sufficient internal working storage to process the command.
System Action:  The command is not processed, but IRLM processing continues normally.
Operator Response:  Inform the system programmer. Reenter the command after storage is available to process the command.
System Programmer Response:  Increase the region size specified on the IRLM startup procedure.

DXR108I  *irmx* PURGE, nnnnnnnnn COMMAND FAILED yyyyyyyyy
Explanation:  A PURGE command specified either a name of an active DBMS or a name that is not known to this IRLM.
  nnnnnnnnn  The dbmsname specified on the PURGE,dbmsname command.
  yyyyyyyyy  The reason the purge command failed:
  PURGE IN PROGRESS:  Either another PURGE command is being processed, or the IRLM is in the process of cleaning up from the disconnection of another group member.
  NAME NOT FOUND OR ACTIVE:  The DBMS name specified cannot be found, or that DBMS is identified as an active subsystem and cannot be purged by the PURGE command.
System Action:  The command failed, but IRLM processing continues normally.
Operator Response:  Reenter the PURGE command with the correct parameters.

DXR109I  *irmx* PURGE COMMAND COMPLETED FOR nnnn
Explanation:  A PURGE command completed successfully.
nnnn  The DBMS name specified on the PURGE,dbmsname command
System Action:  Processing continues normally.

DXR110I  *irmx* STOP COMMAND ACCEPTED
Explanation:  The IRLM accepted the STOP command or IRLM has initiated the AUTOSTOP function and is beginning the normal shutdown process.
System Action:  The IRLM is performing shutdown processing. The IRLM subtasks are being quiesced and detached. If the IRLM is actively part of a data sharing group, then the other IRLMs are informed when this IRLM leaves the data sharing group. If IRLM was autostarted by the DB2 IRLM will issue this message when the DB2 terminates.

DXR116E  *irmx* INITIALIZATION FAILED, CODE=xx DETECTED BY zzzzzzz
Explanation:  The IRLM was unable to complete initialization because of error code xx. The name of the module that detected the failure is zzzzzzz.
The values of xx are:
  01  Unable to allocate global storage.
  02  Unable to allocate local storage.
  03  The IRLMID was missing or invalid. IRLMID must be specified as a 1 to 3-digit number from 0 through 255. The IRLMID must be unique among all IRLMs belonging to the same data sharing group (having the same GROUP parameter). This code can also be returned if you are using a printable character (such as 'D') for the IRLM identifier. Because of the way MVS interprets quotes, a printable character must be surrounded by enough single quotes for IRLM to determine that this is a printable character. For the IRLMID parameter in the startup procedure, there must be seven quotes on either side of the character (''''D'''''). If you are specifying the IRLMID on the EXEC statement, there must be three quotes on either side ('''D''').
  05  The DEADLOCK parameter was missing or invalid. This parameter must be specified as iii,kkkk, where iii and kkkk are 1 to 4-digit numbers from 1 through 9999.
An MVS subsystem SSCVT containing the name specified by the IRLMNMM parameter does not exist. IRLM was not properly registered with MVS to use the subsystem interface.

Error in module zzzzzzzz initialization.

Error loading IRLM modules.

IRLM was already started.

The SCOPE parameter was missing or invalid. Either LOCAL, GLOBAL, or NODISCON must be specified.

The MAXCSA parameter was missing or invalid. This parameter must be specified as a 1 or 3-digit number from 1 to 999.

The IRLMNMM parameter was missing or a length greater than 4 was specified.

The SETDIE for the initial deadlock time interval failed.

The PC parameter was specified incorrectly. Either YES or NO must be specified.

The operating system on which IRLM is attempting to start is not MVS/XA or higher.

The MAXUSR parameter was invalid.

Invalid group name. A 1 to 8 character group name must be specified if running SCOPE=GLOBAL.

Invalid lock table name. The lock table name must be the same as the one defined in the MVS locking policy, or it must not be specified.

The CTRACE DELETE HEAD-level trace failed.

The CTRACE DEFINE HEAD-level trace failed.

The CTRACE DEFINE SUB trace failed.

More than one displayable character was specified for the IRLMID parameter.

An invalid value for the TRACE parameter is specified. The only valid values are YES and NO.

The value specified for HASH= is not in the valid range of 0-1024 or is not an even power of two. (i.e. 2,4,8,16,...)

System Action: IRLM user abend 2018 is issued.

Operator Response: Notify the system programmer.

System Programmer Response: Take the following action based on the code:

01 Make global storage available to IRLM. Analyze the dump for more information.

02 Increase the region size on the IRLM startup procedure. Analyze the dump for more information.

03 Correct the IRLMID parameter on the IRLM startup procedure.

04 Correct the DEADLOK parameter on the IRLM startup procedure.

05 Verify that the IRLM startup procedure specifies the desired IRLM name. If IRLMNMM specifies the desired name, verify that an MVS subsystem with that name is defined.

07 Analyze the dump to determine the problem.

08 Analyze the dump to determine the problem.

09 Verify that the IRLM startup procedure specifies the desired IRLM name.

10 Correct the SCOPE parameter on the IRLM startup procedure.

11 Correct the MAXCSA parameter on the IRLM startup procedure.

12 Correct the IRLMNMM parameter on the IRLM startup procedure.

13 Analyze the dump to determine the problem.

14 Correct the IRLM PC parameter.

15 IRLM must be run on an MVS/XA or higher system.

16 Correct the MAXUSR parameter.

17 Correct the XCF group name parameter in the IRLM startup procedure.

18 Correct the lock table name parameter in the IRLM startup procedure.

19 Analyze the dump to see what is wrong with CTRACE.

20 Correct the IRLM startup procedure.

21 Correct the IRLM startup procedure.

22 Correct the IRLM startup procedure.

23 Correct the value for the HASH parameter and re-issue the START command.

24 Correct the value for the HASH parameter and re-issue the START command.

For codes 1, 2, 6, 7, 8, 13, 18, 19, and 20, an SDUMP is also taken. The IRLM discontinued its initialization processing.

Explanation: The IRLM successfully completed initialization and is available for use. If SCOPE=GLOBAL or NODISCON is specified, message DXR132I is issued when the IRLM connects to the global environment and is capable of inter-system data sharing.

System Action: The IRLM is processing normally.

DXR117I  itrnx INITIALIZATION COMPLETE

Explanation: The IRLM end-of-task routine released all of the MVS common storage that was in use by the terminating IRLM except for storage required for EOT/EOM processing. The HI-CSA is the highest amount of CSA + ECSA allocated to the IRLM during this initialization. The HI-ACCT-CSA is the highest amount of CSA + ECSA allocated to the IRLM for lock control blocks (MAXCSA applies only to this value). The value for HI-CSA or HI-ACCT-CSA is displayed as either xxxK for kilobytes or xxxM for megabytes.

System Action: The IRLM terminated processing.

Operator Response: None is required. Enter the S irlmproc command to restart the IRLM.
**DXR12E** *irlmx ABENDED UNDER IRLM TCB/SRB IN MODULE xxxxxxx ABEND CODE zzzz*

**Explanation:** The IRLM experienced an unrecoverable programming error while processing under an IRLM execution unit. Global sharing with the IRLM issuing the message is inhibited.

*xxxxxxx* The name of the module that detected the failure.

*zzzz* The abend code associated with the failure.

**System Action:** The IRLM is performing abnormal termination processing.

**Operator Response:** Notify the system programmer. Ensure the SYS1.DUMPxx data set containing the SDUMP is not overwritten before the dump is analyzed.

**System Programmer Response:** Use the IPCS service aid to analyze the dump to determine the cause of the failure.

---

**DXR123I** *irlmx SUCCESSFULLY JOINED THE DATA SHARING GROUP WITH yyyyM HASH AND nnnnnnn RECORD LIST ENTRIES.*

**Explanation:** The IRLM successfully connected to the data sharing group. This includes a successful join to the XCF group and a successful connection to the lock structure. (XCF is the cross-system coupling facility component of MVS.) The IRLM can now participate in inter-system data sharing. The value yyyy represents the number of LOCK HASH entries in units of 1048576 and nnnnnnn represents the number of Record List Entries available in the Coupling Facility. If the number of LOCK HASH entries is less than 1048576, yyyy will be zero. The first IRLM to CONNECT to the group causing structure allocation, dictates these values for the group.

**System Action:** The IRLM continues operation.

---

**DXR131I** *irlmx OUT OF xxxx STORAGE DETECTED DURING DEADLOCK. DEADLOCK PROCESS DELAYED.*

**Explanation:** IRLM detected an out-of-storage condition during deadlock detection of resolution processing. Rather than abending the IRLM, the deadlock process for this deadlock detection interval was ended before completely detecting or resolving deadlocks. If this condition is permitted to persist, undetected deadlocks might occur.

*xxxx* The type of storage IRLM was attempting to get when the out-of-storage condition was detected. It is either ECSA for extended CSA, or PRIVATE for IRLM private storage.

**System Action:** The IRLM cleans up deadlock data structures before completing deadlock detection or resolution. Deadlock detection or resolution is attempted in one local deadlock cycle as specified on the IRLM startup procedure parameter.

**Operator Response:** Stop and restart the IRLM specifying a larger region size on the IRLM startup procedure. IRLM need not be stopped immediately and can remain up indefinitely if the volume of requests to the IRLM is reduced by limiting DBMS activity.

---

**DXR123E** *irlmx ABENDED UNDER DBMS TCB/SRB IN MODULE xxxxxxx ABEND CODE=zzzz ERROR ID=wwww*

**Explanation:** The IRLM experienced an unrecoverable programming error while processing a request executing under a DBMS execution unit. Global sharing with the IRLM issuing the message is inhibited. An MVS SYS1.LOGREC entry and an SDUMP were requested. An abend is issued to terminate the IRLM job-step task.

*xxxxxxx* The name of the module that detected the failure.

*zzzz* The abend code associated with the failure.

*wwww* The error ID or dump sequence number for the associated LOGREC entry.

**System Action:** The IRLM is performing abnormal termination processing.

**Operator Response:** Notify the system programmer. Ensure the SYS1.DUMPxx data set containing the SDUMP is not overwritten before the dump is analyzed. Follow IRLM restart procedures.

**System Programmer Response:** Use the IPCS service aid to analyze the dump to determine the cause of the failure.

---

**DXR124I** *irlmx ABENDED VIA MODIFY COMMAND*

**Explanation:** The IRLM terminated as a result of receiving an IRLMproc,ABEND command. Global sharing with the IRLM issuing the message is inhibited. An MVS SYS1.LOGREC entry was requested. If the NODUMP parameter was omitted from the MODIFY command, an SDUMP was requested. If the NODUMP option is included & the command is issued twice or there is no DBMS identified to the IRLM, a dump is taken and this message is also issued.

**System Action:** The IRLM is performing abnormal termination processing.

**Operator Response:** If an SDUMP was taken, ensure that the SYS1.DUMPxx data set containing the SDUMP is not overwritten before the dump is analyzed. Notify the system programmer.

**System Programmer Response:** Use the IPCS service aid to analyze the dump to determine the cause of the failure.

---

**DXR133I** *irlmx TIMEOUT DURING GLOBAL INITIALIZATION*

**Explanation:** A timeout occurred during while the IRLM was attempting global initialization. This problem usually occurs because incorrect lock structure or XCF group names were specified on the LOCKTAB and IRLMGRP parameters. (XCF is the cross-system coupling facility component of MVS.) However, anything that delays global initialization for at least 30 seconds causes this message to be issued.

**System Action:** IRLM continues to issue this message until one of the following occurs:

- Global initialization completes.
- The system programmer takes some action to abend the IRLM.
- IRLM abends with U2025 after an internal limit of timeout messages is reached.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Investigate what is delaying initialization. Check the lock structure and XCF group...
names to ensure that the names specified for this IRLM match the names for all other group members. You can use XCF commands to display the current members in the XCF group to see if this IRLM joined successfully. If necessary, take dumps to assist in failure analysis. Since this message is issued because of missing interaction with other members, you must take dumps of all SYSPLEX IRLM members.

**DXR134E** irlmx JOIN XCF GROUP wwwwww FAILED FOR GLOBAL INITIALIZATION, RETURN=xx, REASON=yyyy

**Explanation:** The IRLM cannot successfully join the XCF group. (XCF is the cross-system coupling facility component of MVS.)

wwwwwww The IRLMGRP name specified on the IRLM startup procedure

**System Action:** IRLM does not connect to the data sharing group. The identify request for the DBMS attempting to identify is rejected.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Try to determine why the IRLM cannot join. See the IXJOIN section of MVS/ESA Programming: Sysplex Services Reference for an explanation of the return and reason codes. If the reason for the connection failure was corrected, restart the IRLM and reidentify the DBMS to it.

**DXR135E** irlmx CONNECT TO LOCK TABLE wwwwww FAILED FOR GLOBAL INITIALIZATION, RETURN=xx, REASON=yyyy

**Explanation:** The IRLM cannot successfully connect to the lock table.

wwwwwww The lock table name passed at identify time or the LOCKTAB name specified on the IRLM startup procedure

**System Action:** IRLM does not connect to the data sharing group. The identify request for the DBMS attempting to identify is rejected.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Try to determine why the IRLM cannot connect. See the IXLOCKCONN section of MVS/ESA Programming: Sysplex Services Reference for an explanation of the return and reason codes. If the reason for the connection failure was corrected, restart the IRLM and reidentify the DBMS to it.

**DXR136I** irlmx HAS DISCONNECTED FROM THE DATA SHARING GROUP

**Explanation:** The IRLM left the data sharing group by disconnecting from both the XCF group and the lock structure. (XCF is the cross-system coupling facility component of MVS.) IRLM takes this action when all identified DBMSs have issued a QUIT request to the IRLM to terminate their active data sharing activity.

**System Action:** This IRLM disconnected from the data sharing group.

**DXR137I** irlmx GROUP STATUS CHANGED. irlmx HAS BEEN DISCONNECTED FROM THE DATA SHARING GROUP

**Explanation:** IRLM irlmx lost connectivity to the data sharing group.

irlmx The ID of the disconnected IRLM.

All surviving IRLMs issue this message. The disconnected IRLM might issue the DXR136I message.

**System Action:** IRLM irlmx was disconnected from the data sharing group.

**Operator Response:** None is required on this MVS system. See the DXR136I message for the proper operator response on the disconnected system.

**DXR138E** irlmx QUERY STRUCTURE FOR LOCK TABLE wwwwww FAILED FOR GLOBAL INITIALIZATION, RETURN=xx, REASON=yyyy

**Explanation:** This message is issued when IRLM gets a nonzero return code from a QUERY to XCF for the lock structure size.

wwwwwww The lock table name passed at identify time or the LOCKTAB name specified on the IRLM startup procedure

IRLM is unable to connect to the data sharing group if it does not have a valid structure size.

**System Action:** IRLM does not connect to the data sharing group. The identify request for the DBMS attempting to identify is rejected.

**Operator Response:** Try to determine from the return and reason codes specified in the message what the problem is with XCF. See the IXQUERY section of MVS/ESA Programming: Sysplex Services Reference for an explanation of the return and reason codes. Restart the DBMS when the problem is fixed.

**System Programmer Response:** If the operator is unable to find the problem, determine why the XCF QUERY request failed.

**DXR139E** irlmx zzzzzzz REQUEST FAILED, RETURN=xx, REASON=yyyy

**Explanation:** An IRLM request to MVS failed with an unexpected return and reason code. The request type is zzzzzzz.

**System Action:** IRLM terminates with abend U2025.

**Operator Response:** Notify the system programmer

**System Programmer Response:** Use the request type, reason and return codes to find out what caused the failure. See request type ‘zzzzzzzz’ of MVS/ESA Programming: Sysplex Services Reference for an explanation of the return and reason codes. Save the IRLM dump for analysis by IBM service.
DXR140E  *IRLM* IRLMID=zzz IS NOT UNIQUE FOR THE DATA SHARING GROUP IT ATTEMPTED TO JOIN

**Explanation:** An IRLM attempted to join a data sharing group, but IRLMID zzz that was specified in the IRLM startup procedure was already in use by another IRLM in the group.

**System Action:** IRLM terminates with abend U2025.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Change the IRLMID in the startup procedure to a number from 1 through 255 that is not already in use by another IRLM in the data sharing group.

---

DXR141I  *IRLM* THE LOCK TABLE *wwwwww* WAS ALLOCATED IN A zzzzzzzz FACILITY

**Explanation:** The MVS coupling facility containing the lock table being used by IRLM is executing in zzzzzzzz state.

- **zzzzzzzz** Volatile or Nonvolatile
  The volatile state indicates that there is no backup battery for the facility if a power failure occurs.

- *wwwwww* The lock table name passed at identify time or the LOCKTAB name specified on the IRLM startup procedure.

**System Action:** Data sharing continues normally.

**Operator Response:** Notify the system programmer.

**System Programmer Response:** Take some action to move to a nonvolatile structure if that is desired for better availability.

---

DXR142E  *IRLM* THE LOCK STRUCTURE *wwwwww* IS zzz IN USE

**Explanation:** This message shows what percent of the available capacity of the lock structure is being used by the group and can indicate that some action is needed to relieve the storage.

- *wwwwww* The lock table name currently in use by the IRLM.
- **zzz** One of the following values: 80, 90, 100.

**System Action:** This message stays on the console until the storage falls below 70% or until the operator removes the message. Data sharing continues, possibly with restrictions, depending on how full the lock structure is.

- At 80% full, data sharing continues with no restrictions, but storage is reaching a critical threshold.
- At 90% full, data sharing continues with restrictions. Only 'must-complete' type of requests that require lock structure storage are processed. All others that require lock structure storage are denied with an 'out of lock structure storage' reason code.
- At 100% full, data sharing continues with more restrictions. Any request that requires lock structure storage is denied with an 'out of lock structure storage' reason code.

**Operator Response:** Notify the system programmer if there is a concern about running out of space in the lock structure.

**System Programmer Response:** Take some action to increase the size of the lock structure if more space is needed. Force to completion update-type transactions to free modify locks which will in turn free some lock structure storage.

---

DXR143I  *IRLM* REBUILDING LOCK STRUCTURE BECAUSE IT HAS FAILED OR AN IRLM LOST CONNECTION TO IT

**Explanation:** The lock structure failed or one or more IRLMs lost connections to it. The IRLM attempts to rebuild all the current information into the new lock structure without modifying any of the attributes.

**System Action:** Data sharing is stopped while rebuild is in progress. After rebuild completes successfully, data sharing continues normally. If rebuild does not succeed, IRLM disconnects from the data sharing group.

**Operator Response:** Notify the system programmer to repair the failed structure or connections to it.

**System Programmer Response:** Determine the reason for the structure or connection failure and take actions to recover the failed structure.

---

DXR144I  *IRLM* REBUILDING LOCK STRUCTURE BECAUSE ALL CONNECTIONS TO IT ARE IN USE

**Explanation:** The last available connection to the lock structure was allocated. IRLM attempts to rebuild into another structure and modify the lock structure attributes to allow more connections.

**System Action:** Data sharing is stopped while rebuild is in progress. After rebuild completes successfully, data sharing continues normally with more connections available for the group. If rebuild does not succeed, data sharing continues but new members are not able to join the group.

**Operator Response:** Determine whether the group needs to be able to handle more members, and if so, change the MAXUSRS parameter on the IRLMPROC.

**System Programmer Response:** Determine the reason why rebuild failed. Take actions to make a bigger structure available to handle the bigger group.

---

DXR145I  *IRLM* REBUILDING LOCK STRUCTURE AT OPERATORS REQUEST

**Explanation:** The operator started rebuild with an MVS SETXCF command. IRLM attempts to rebuild into another structure without modifying any of the lock structure attributes.

**System Action:** Data sharing is stopped while rebuild is in progress. After rebuild completes successfully, data sharing continues normally. If rebuild failed, data sharing still continues normally.

**Operator Response:** Ensure that rebuild completes successfully. Notify the system programmer if any problem occurs during rebuild. If rebuild failed, contact the system programmer to determine why.

**System Programmer Response:** Determine the reason why rebuild failed. Take actions to make the desired structure available.
**DXR146I**  
**irlnx REBUILD OF THE LOCK STRUCTURE COMPLETED SUCCESSFULLY WITH yyyyM HASH AND nnnnnnn RECORD LIST ENTRIES.**  

**Explanation:**  The lock structure was successfully moved to another coupling facility structure. The value yyyy represents the number of LOCK HASH entries in units of 1048576 and nnnnnnn represents the number of Record List Entries available in the Coupling Facility. If the number of LOCK HASH entries is less than 1048576, yyyy will be zero. The first IRLM to CONNECT to the group causing structure allocation dictates these values for the group.  

**System Action:**  Data sharing continues normally.

---

**DXR147I**  
**irlnx REBUILD OF THE LOCK STRUCTURE WAS STOPPED**  

**Explanation:**  The lock structure could not be moved to another coupling facility structure. Rebuild process was terminated.  

**System Action:**  Data sharing continues normally if the old lock structure is still available. If the lock structure failed, IRLM disconnects from the group.  

**Operator Response:**  Contact the system programmer to determine why rebuild was stopped.  

**System Programmer Response:**  Determine why rebuild was stopped. Take actions to make a suitable coupling facility structure available for rebuild.

---

**DXR148I**  
**irlnx REBUILD OF LOCK STRUCTURE WAS STOPPED BY THE OPERATOR**  

**Explanation:**  The operator issued a console command to stop the rebuild.  

**System Action:**  The REBUILD is stopped and IRLM will either DISCONNECT from the group or continue to process under the old structure, depending on the reason rebuild was initiated.  

**Operator Response:**  If IRLM DISCONNECT from the group, follow local recovery procedures.  

**System Programmer Response:**  Determine why the rebuild was stopped and take appropriate action to restore rebuild capability.

---

**DXR149I**  
**irlnx REBUILD OF LOCK STRUCTURE WAS STOPPED DUE TO FAILURE OF A REQUIRED IRLM IN THE GROUP**  

**Explanation:**  Rebuild was stopped because one of the IRLMs involved in the rebuild has failed.  

**System Action:**  The REBUILD is stopped and IRLM will either DISCONNECT from the group or continue to process under the old structure, depending on the reason rebuild was initiated.  

**Operator Response:**  If IRLM DISCONNECT from the group, follow local recovery procedures.  

**System Programmer Response:**  Determine why the IRLM failed and take appropriate action to restore rebuild capability.

---

**DXR150I**  
**irlnx REBUILD OF LOCK STRUCTURE WAS STOPPED DUE TO FAILURE OF THE NEW STRUCTURE**  

**Explanation:**  Rebuild was stopped because the NEW STRUCTURE failed.  

**Operator Response:**  If IRLM DISCONNECT from the group, follow local recovery procedures.  

**System Action:**  The REBUILD is stopped and IRLM will either DISCONNECT from the group or continue to process under the old structure, depending on the reason rebuild was initiated.  

**System Programmer Response:**  Determine why failure occurred on the new structure and take appropriate action to restore rebuild capability.

---

**DXR151I**  
**irlnx REBUILD OF LOCK STRUCTURE WAS STOPPED DUE TO FAILURE ON QUERY OR CONNECT OF THE NEW STRUCTURE**  

**Explanation:**  Rebuild was stopped because IRLM received a bad return code on the IXQUERY or IXLCONN request to XCF for the new structure.  

**System Action:**  The REBUILD is stopped and IRLM will either DISCONNECT from the group or continue to process under the old structure, depending on the reason rebuild was initiated.  

**Operator Response:**  If IRLM DISCONNECT from the group, follow local recovery procedures.  

**System Programmer Response:**  Determine why the bad return code was received and take appropriate action to restore rebuild capability.

---

**DXR152I**  
**irlnx REBUILD OF LOCK STRUCTURE WAS STOPPED DUE TO AN OUT OF SPACE CONDITION ON THE NEW STRUCTURE**  

**Explanation:**  Rebuild was stopped because the new structure contains insufficient space to hold all of the data from the old structure or from the RESTART.  

**System Action:**  The REBUILD is stopped and IRLM will either DISCONNECT from the group or continue to process under the old structure, depending on the reason rebuild was initiated.  

**Operator Response:**  If IRLM DISCONNECT from the group, follow local recovery procedures.  

**System Programmer Response:**  Determine why the new structure was not large enough to contain all of the data from the old structure or restart. Take appropriate action to restore rebuild capability.

---

**DXR153I**  
**irlnx REBUILD OF LOCK STRUCTURE WAS STOPPED DUE TO AN UNEXPECTED RETURN CODE FROM XES SERVICES**  

**Explanation:**  Rebuild was stopped because IRLM received a bad return code on a request to SLM.  

**System Action:**  The REBUILD is stopped and IRLM will either DISCONNECT from the group or continue to process under the old structure, depending on the reason rebuild was initiated.  

**Operator Response:**  If IRLM DISCONNECT from the group, follow local recovery procedures.
System Programmer Response: Determine why the return code was received from SLM and take appropriate action to restore rebuild capability.

DXR154I irlmx REBUILD OF LOCK STRUCTURE WAS STOPPED DUE TO SUCCESSFUL COMPLETION OF GROUP FUNCTION LEVEL CHANGE

Explanation: IRLM started a REBUILD to establish a new group function level because a new member with a different service level is joining the group. The IRLM rebuild process then checks to see if a complete rebuild is needed to complete the group function level change. This message is issued when a complete rebuild is not needed for a successful group function level change.

System Action: The REBUILD is stopped and the new IRLM member joins the group.

System Programmer Response: Compare the service level of the IRLM member that failed to join the group with the service level of the other IRLM members in the group. The pertinent service levels can be found by issuing the MVS modify command "f irlmproc,status,all" on all the IRLMs involved.

DXR158I irlmx CANNOT COEXIST WITH AT LEAST ONE EXISTING MEMBER. ALL DBMS IDENTIFY REQUESTS TO THAT IRLM WILL BE DENIED.

Explanation: The IRLM member, irlmx, could not coexist with one or more existing members of the group because it does not have the service level that includes coexistence support.

System Action: The REBUILD is stopped and the new IRLM member is not allowed to join the group. The DBMS that was identifying itself to the new IRLM member is notified that the IDENTIFY failed.

System Programmer Response: Compare the service level of the IRLM member that failed to join the group with the service level of the other IRLM members in the group. The pertinent service levels can be found by issuing the MVS modify command "f irlmproc,status,all" on all the IRLMs involved.

DXR159I irlmx RUNTIMEO:TIMEOUT DATA COLLECTION STARTED.

Explanation: The MODIFY irlmproc,RUNTIMEO has been successfully issued and timeout detection has been started. When two global deadlock cycles have finished, DXR162I will be issued.

System Action: IRLM processing continues normally, with deadlock detection enabled for two global cycles.

Operator Response: Watch for message DXR162I, which indicates that data collection has completed. Then use RMF to generate the timeout BLOCKER/WAITER report. If no candidate waiters were found, the report will be null and no further action is required unless the waiters persist. If the waiters persist and no 79.15 records are written, attempt to recover by issuing the SETXCF REBUILD command, if applicable. If a report is generated, follow local operation guidelines. If diagnostic analysis is to be performed, take MVS console dumps of the IMS and IRLM address spaces for each member before taking any recovery action. If this is in a SYSPLEX environment, include XESDATA in the dump options. Contact the system programmer.

System Programmer Response: Determine if the wait is caused by application logic or other factors. If unable to determine the cause of the wait, contact IBM support with the documentation above.

DXR160I irlmx RUNTIMEO:COMMAND IS NOT SUPPORTED BY AT LEAST ONE IRLM GROUP MEMBER, AND IS REJECTED.

Explanation: At least one of the IRLMs in the group does not have the code necessary to support TIMEOUT. The TIMEOUT code must be present on all members.

System Action: IRLM processing continues normally, with no timeout detection.

Operator Response: Notify the system programmer.

System Programmer Response: At least one IRLM in the data sharing group does not have PN79682 applied. The APAR must be applied to all IRLM members of the data sharing group.
**DXR161I**  
*ilrmx RUNTIMEO:COMMAND IS NOT SUPPORTED BY ANY DBMS SUBSYSTEM ON THIS IRLM, AND IS REJECTED.*  

**Explanation:** The MODIFY ilrmproc,RUNTIMEO has been issued on this IRLM but none of the IMS systems identified to this IRLM provided a timeout exit.  

**System Action:** IRLM processing continues normally.  

**Operator Response:** Notify the system programmer.  

**System Programmer Response:** Determine why the IMS does not have timeout support code.  

---  

**DXR162I**  
*ilrmx CYCLE NUMBER nnnnnnnn PROCESSED FOR TIMEOUT*  

**Explanation:** A TIMEOUT candidate has been detected on at least one IRLM. If an incompatible blocker was found, the IMS TIMEOUT EXIT has been driven to present WAITER/BLOCKER information.  

**System Action:** IRLM processing continues normally.  

DXR162I is issued only by the Global Deadlock Manager (GDM), the IRLM with the lowest IRLMID in the IRLMPROC. The message will be issued once per minute if there is at least one candidate waiter found during the global deadlock cycle. If a cycle occurs and no timeout waiter is found during that time, the flag is reset and DXR162I will be issued the next time a candidate waiter is present.  

**Operator Response:** Based on local operational guidelines, use RMF™ to generate a report from the 79.15 (4F 0F) SMF records with cycle number nnnnnnn. If the message is issued and no 79.15 records are found, one of these errors is likely to have occurred:  

1. SMF has not been enabled for the 79.15 to be cut to the MAN* data set. Check the *.IEFU84 member for MODNAME(ERBDSSMF) on each system.  
2. SMF has not presented the 79.15 to the RMF data space due to a set-up error in the data space. Make sure the dataspace has been defined. Enable the 79.15 to the RMF with: RMF,SMFBUF(,RECTYPE(79))  
3. The 79.15 record with cycle number nnnnnnnn was delayed in writing. Request the same cycle number again.  
4. IRLM did not find an incompatible blocker  

If the waiter cannot be identified and you wish to consult IBM SERVICE, start the IRLM "INTERNAL" CTRACE for subtype XCF on each member, then collect MVS CONSOLE dumps of the IRLM(s) and their IMS DLI and any suspicious dependent regions. If this is in a SYSPLEX environment, you must take and save dumps of all IRLMs with XESDATA and associated DBMS regions. Once the dumps are captured, you may turn off XCF tracing. If it appears to be an invalid WAIT condition and this is a SYSPLEX environment, issue a SETXCF REBUILD to attempt recovery. If this fails to resume the waiter, follow local operation guidelines.  

**System Programmer Response:** Determine if the wait is caused by application logic, operator error, or other factors. The most common cause is incorrect dispatch priority. If unable to determine the cause of the wait, contact IBM support with the documentation above.  

---  

**DXR163I**  
*ilrmx RUNTIMEO:COMMAND IS NOT SUPPORTED BY AT LEAST ONE OF THE OTHER DBMS GROUP MEMBERS, AND IS REJECTED.*  

**Explanation:** The MODIFY ilrmproc,RUNTIMEO has been issued on this IRLM and at least one of the IMS did not specify a timeout exit on this IRLM or another IRLM in the group.  

**System Action:** IRLM processing continues normally.  

**Operator Response:** Notify the system programmer.  

**System Programmer Response:** Determine why the IMS does not have timeout support code.  

---  

**DXR164E**  
*ilrmx CANNOT RECOVER FOR A FAILED MEMBER DUE TO LOSS OF CONNECTIVITY TO THE LOCK STRUCTURE*  

**Explanation:** IRLM detects loss of connectivity to the lock structure during member recovery or global initialization. IRLM is longer able to support data sharing without the retained lock information.  

**System Action:** Disconnect from the data sharing group.  

**User Response:** Notify the system programmer to correct the problem with the coupling facility.  

**Problem Determination:** See IXC messages to determine the root cause of the failure and the appropriate corrective action.  

---  

**DXR165I**  
*ilrmx TERMINATED VIA IRLM MODIFY COMMAND*  

**Explanation:** An operator issued a MODIFY IRLM,ABEND command.  

**System Action:** IRLM shuts down.  

---  

**DXR166E**  
*ilrmx CONNECT TO LOCK STRUCTURE FAILED FOR GLOBAL INITIALIZATION*  

**Explanation:** IRLM detects loss of connectivity to the lock structure during member recovery or global initialization. IRLM is longer able to support data sharing without the retained lock information.  

**System Action:** Disconnect from the data sharing group.  

**User Response:** Notify the system programmer to correct the problem with the coupling facility.  

**Problem Determination:** See IXC messages to determine the root cause of the failure and the appropriate corrective action.  

---  

**DXR167E**  
*ilrmx IRLM IS UNABLE TO PERFORM SOME CRITICAL INTERNAL PROCESSES.*  

**Explanation:** IRLM is attempting to perform a process but cannot get a necessary resource to do so.  

**System Action:** The IRLM continues operation. This message stays on the console until IRLM is able to perform the internal operation. Because some internal processes are unable to run, the following symptoms might occur:  

- A new DBMS can’t identify.  
- New members might not be able to join. They will time out during global initialization and eventually terminate abnormally.  
- A terminated DBMS is not resumed.
• Failed members might not get properly partitioned from the group because recovery actions for them cannot run.
• Transactions do not deadlock or time out
• A transaction hangs.
• Other processes contending with the hung process might also hang, potentially causing a chain reaction.
• The whole group might hang.
• REBUILD of the IRLM group will not run.

Operator Response: Notify the system programmer.

System Programmer Response: Determine what is preventing IRLM internal processes from running. The most likely reason is an incorrect dispatching priority. Possible mistakes are:
• IRLM is running with a lower dispatching priority than the DBMS or the application jobs.
• A job with a low dispatching priority is interrupted while holding IRLM resources and is unable to get dispatched.

If the condition is from an operational error that can be corrected without shutting down IRLM, correct the condition as soon as possible. Otherwise, shut down IRLM, correct the error condition, and restart IRLM. This can be done at a convenient time depending on the extent of processing loss.

**DXR168I** irlmx CRITICAL INTERNAL PROCESSES ARE NOW RUNNING.

Explanation: This message appears if a situation reported in a previous DXR167E message has been resolved.

System Action: The IRLM continues operation.

Operator Response: Notify the system programmer.

System Programmer Response: Try to determine what might have caused the temporary problem as reported in a previous DXR167E message. The most likely reason is an incorrect dispatching priority. Possible mistakes are:
• IRLM is running with a lower dispatching priority than the DBMS or the application jobs.
• A job with a low dispatching priority is interrupted while holding IRLM resources and is unable to get dispatched.

If possible, correct the problem without shutting down IRLM. Otherwise, fix the problem and restart IRLM at a convenient time.

If you cannot identify an operational error as the cause of the problem, and if DXR167E appears again, collect dumps of IRLM and the DBMS that is identified to it and call IBM Service.

**DXR169I** irlmx THE STORAGE SHORTAGE FOR LOCK STRUCTURE wwwwwww HAS BEEN RELIEVED.

Explanation: This message indicates that the storage shortage indicated by a previously reported DXR142E message is relieved. The amount of the lock structure in use has dropped below 70%.

wwwwwww The lock table name currently in use by the IRLM.

System Action: IRLM resumes normal data sharing with no restrictions.

**DXR170I** irlmx THE LOCK STRUCTURE wwwwwww IS zz% IN USE

Explanation: This message shows what percent of the available capacity of the lock structure is being used by the group. The values are 50%, 60% and 70%. This message is issued only once at each of the three levels of usage and gives an indication of peak usage during the execution of an IRLM subsystem.

wwwwwww The lock table name currently in use by the IRLM.

zz One of the following values: 50, 60, 70.

System Action: The IRLM continues operation.

Operator Response: Notify the system programmer.

System Programmer Response: This message is a warning that there is a potential to overcommit the storage for the lock structure named in the message. Track the occurrences of this message to determine a growth trend. If a growth pattern is detected, increase the storage size specifications for the lock structure in the coupling facility policy and activate the revised policy.

**DXR171I** irlmx xxxxxxxxx ARM REGISTRATION FAILED, MVS ARM RETURN CODE = yyyy-yyyy
**DXR173I**  
*irmtx xxxxxxxx ARM DEREGISTRATION FAILED. MVS ARM RETURN CODE = yyyyyyyyy, MVS ARM REASON CODE = xxxxxxxx*

**Explanation:**  
IRLM encountered an error using the specified MVS automatic restart manager (ARM) function. xxxxxxxx is the IRLM ARM element name. For data sharing environments, it is a concatenation of the IRLM group name, the IRLM subsystem name, and the IRLM ID. For non-data sharing environments, it is the IRLM subsystem name and the IRLM ID.

**System Action:**  
IRLM continues. However, if IRLM terminates normally or abnormally, the MVS ARM automatically restarts IRLM.

**System Programmer Response:**  
Refer to OS/390 MVS Programming: Sysplex Services Reference for the function, return code, and reason code from the IXCARM request.

---

**DXR174E**  
*irmtx xxxxxxxx csect-name ARM EVENT EXIT FAILED*

**Explanation:**  
IRLM automatic restart manager (ARM) event exit encountered an error while attempting to define the IRLM subsystem to MVS.

**System Action:**  
The automatic restart of the IRLM subsystem stops.

**System Programmer Response:**  
Refer to OS/390 MVS Programming: Assembler Services Reference for return and reason codes from the IEFSSI request. To start IRLM manually, use the START irlmproc command on any system where the IRLM subsystem is defined. If IRLM is not active and AUTO START = yes for IRLM defined in DSNZPARM, then DB2 will attempt to start IRLM when DB2 is started.

---

**DXR175E**  
*irmtx IRLM IS UNABLE TO OBTAIN STORAGE - storage_type*

**Explanation:**  
IRLM is attempting to acquire storage from CSA or ECSA when either the MAXCSA value specified on IRLM startup has been exceeded or the storage type needed is exhausted.

The value in field storage_type specifies the cause of the error:
- MCSA means MAXCSA has been exceeded.
- CSA means system CSA has been exhausted.
- ECSA means system ECSA has been exhausted.

This can be caused by:
- too low a value for the IRLM startup parameter, or an unexpected peak of IRLM work load.
- too little CSA generated into the system, or an unexpected peak of demand for CSA storage by the jobs and tasks running in the MVS system.
- too little ECSA generated into the system, or an unexpected peak of demand for ECSA storage by the jobs and tasks running in the MVS system.

**System Action:**  
The IRLM continues operating as best it can. This message stays on the console until IRLM is able to acquire the needed storage. Some DBMS requests might be processed successfully, some might be rejected with out of storage return and reason codes, and some might hang.

**Operator Response:**  
Notify the system programmer. Try to reduce the work load on the system or the number of transactions running in the DBMS.

When the out of storage condition is relieved, normal IRLM operation resumes. Because storage is unavailable, the following symptoms might occur:
- transactions might abend with out of storage indications
- message DXR167E might be issued
- transactions might hang
- other processes contending with a hung process will also hang, potentially causing a chain reaction
- the system hangs
- if in a data sharing environment:
  - the whole group might hang
  - new members might not be able to join. They will time out during global initialization and eventually terminate abnormally.
  - failed members might not get properly partitioned from the group because recovery actions for them cannot run.

**System Programmer Response:**  
Determine what is preventing IRLM from obtaining storage. If MAXCSA is too low, specify a larger value, or change the PC parameter to YES. If CSA or ECSA was exhausted, generate more CSA or ECSA into the system or reduce the number of running tasks that are dependent on CSA or ECSA. If the condition is from an operational error that can be corrected without shutting down IRLM, correct it as soon as possible. Otherwise, shut down IRLM, correct the problem, and restart IRLM.

---

**DXR176I**  
*irmtx IRLM STORAGE SHORTAGE RELIEVED*

**Explanation:**  
This message appears if a situation reported in a previous DXR175E message has been resolved.

**System Action:**  
The IRLM continues operation.

**Operator Response:**  
Notify the system programmer.

**System Programmer Response:**  
Try to determine what might have caused the temporary problem as reported in a previous DXR175E message. The most likely reasons are too small a value for the IRLM startup parameter MAXCSA or insufficient CSA or ECSA for the combined tasks running in MVS. If possible, correct the problem without shutting down IRLM.

---

**DXR177I**  
*irmtx THE VALUE FOR @@@@ IS SET TO @@@@@@@@@@@@

**Explanation:**  
This message is issued in response to any successful IRLM MODIFY irlmproc,SET,xxx command.

Where current values for xxx include: CSA= TRACE= TIMEOUT=.

**System Action:**  
CSA= The value of MAXCSA is set to nnn megabytes. MAXCSA controls storage use for lock structures. The lock control structures are allocated from ECSA when PC=NO. If PC=YES has been specified, this command has no affect. The system automatically adjusts nnn to a number between 1 and 999 if number specified is not in this range. If the new MAXCSA value is smaller than the current IRLM CSA
allocation for accountable lock structures, IRLM will reduce its CSA storage when the storage is no longer needed. TRACE=
Where nnn is a value between 10 and 255. Each trace buffer requires 64KB of ECSA storage. IRLM can use a maximum of 255 a minimum number of 10 trace buffers for each trace type.
The system automatically adjusts nnn to the maximum or minimum allowed if nnn specified is out of range. The value specified does not apply if the EXTERNAL CTRACE write is active. If the number of trace buffers set by the command is less than the current buffer allocation, IRLM frees the oldest buffers until the number allocated equals the number set by the command. TIMEOUT= Where nnn is a value between 1 and 3600 seconds. This value must be a multiple of the local deadlock parameter. If the value entered by the user is not an even multiple, the next higher multiple is used. If the value specified is out of range, the maximum or minimum is used.
Since serialization is needed to change the internal timeout value, it is done during the next deadlock cycle. The DXR177I message is not issued until the input has been validated and the value changed during a deadlock cycle.

DXR178I irlmx MAXIMUM CSA IS SET TO nnnMB.
Explanation:  This message is issued in response to the following command:
F irlmproc,SET,CSA=nnn
where nnn is a number between 1 and 999.
System Action:  The value of MAXCSA is set to nnn megabytes. MAXCSA controls storage use for lock structures. The lock control structures are allocated from ECSA when PC=NO. If PC=YES has been specified, this command has no affect.
The system automatically adjusts nnn to a number between 1 and 999 if nnn is not in this range. If the new MAXCSA value is smaller than the current IRLM CSA allocation for accountable lock structures, IRLM will reduce its CSA storage when the storage is no longer needed.

DXR179I irlmx TRACE USAGE TRACE BUFFER STORAGE IN USE: nnnnnKB MAXIMUM NUMBER OF TRACE BUFFERS ALLOWED PER TRACE TYPE: nnn TRACE TYPE ACTIVE BUFFERS IN USE CTRACE WRITER
Explanation:  This message is issued in response to the following command:
F irlmproc,STATUS,TRACE
The message indicates the maximum number of 64KB buffers that IRLM can use for each of its subcomponent trace types.
TRACE TYPE The trace types are:
SLM  Traces interactions with MVS locking component. Applicable only for data sharing
XIT  Traces asynchronous interactions with the MVS locking component. Applicable only for data sharing

XCF  Traces interactions with MVS cross-system coupling services. Applicable only for data sharing.
DBM  Traces interactions with the DBMS identified to this IRLM.
EXP  Traces exception conditions.
INT  Traces member and group events outside normal locking activity.
ACTIVE Whether the trace is active. (You cannot deactivate the EXP and INT traces.)
BUFFERS IN USE How many 64KB buffers are currently being used by this trace.
CTrace WRITE Whether the external CTRACE writer is on.
System Action:  Processing continues normally.
Operator Response:  Trace buffers can be set via 'modify irlmproc,set,trace=nnn' command. You can activate or deactivate traces by using the TRACE CT command of MVS. You cannot turn off the EXP and INT traces. The XIT, EXP and INT are automatically activated when you start IRLM. All traces are automatically activated when TRACE=YES is specified on the IRLMPROC.

DXR180I irlmx AUTOMATIC RESTART MANAGER IS NOT ENABLED
Explanation:  IRLM attempts to utilize the MVS Automatic Restart Manager (ARM) function, but either the system does not have access to an ARM couple data set or the ARM is not set up in the user's environment.
System Action:  IRLM continues; however, if IRLM abnormally terminates, the MVS ARM cannot automatically restart IRLM.
Operator Response:  Notify the system programmer.
System Programmer Response:  Determine why the system does not have access to an automatic restart manager couple data set. If there is no automatic restart manager couple data set defined, determine if the ARM should be set up so that IRLM can take advantage of the MVS ARM function. The purpose of using the ARM is to reduce the time IRLM is down. When IRLM stops abnormally, the MVS ARM will restart it automatically.

DXR181I irlmx RUNTIMEO COMMAND DISABLED
Explanation:  The IRLMs are doing automatic timeout detection and the command is not needed.
System Action:  IRLM processing continues.

DXR182I irlmx MODIFY DIAG COMMAND PROCESSED
Explanation:  This message is issued in response to an IRLM MODIFY irlmproc,DIAG command.
System Action:  IRLM processing continues.
# IRLM Error Return and Reason Codes

The IRLM error return and reason codes are listed below. Some return and reason codes do not apply to DB2 operation.

The values in the 'return code' column show the request completion status:

- **00** The request completed successfully.
- **04** The request completed successfully, but the state of lock remained unchanged.
- **08** The request completed unsuccessfully because of a system error or condition, not a problem in the request.
- **12** The request completed unsuccessfully because of a logic error in the request.
- **16** The request completed unsuccessfully because of an invalid request specification.
- **20** The request completed unsuccessfully because IRLM resources are not available.

## CHANGE request

<table>
<thead>
<tr>
<th>Return Code</th>
<th>Reason Code Byte 1</th>
<th>Reason Code Byte 2</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>04</td>
<td>X'80'</td>
<td></td>
<td>Ownership and/or duration was specified, but no locks were changed for one of these reasons:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• The 'set of locks' specified included no held locks.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• All specified locks had a duration value greater than or equal to the specified duration.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• PSTATE=TSTATE was specified.</td>
</tr>
<tr>
<td></td>
<td>X'20'</td>
<td></td>
<td>Other holders of the lock exist.</td>
</tr>
<tr>
<td></td>
<td>X'10'</td>
<td></td>
<td>From-duration was specified on a CHANGE ALL request, but the from-duration did not match the held-duration for at least one lock. The mismatched lock is not altered, but other locks might have been altered.</td>
</tr>
<tr>
<td></td>
<td>X'08'</td>
<td></td>
<td>This lock was involved in a deadlock condition, but was not selected as the victim.</td>
</tr>
<tr>
<td></td>
<td>X'02'</td>
<td></td>
<td>The CHANGE STATE request specified a 'tstate' value less restrictive than the current held state of the lock.</td>
</tr>
<tr>
<td></td>
<td>X'04'</td>
<td></td>
<td>At least one other work unit holds the lock with the repeatable read (RR) attribute.</td>
</tr>
<tr>
<td></td>
<td>X'02'</td>
<td></td>
<td>The work unit that submitted this lock request holds the lock with the repeatable read (RR) attribute.</td>
</tr>
<tr>
<td>08</td>
<td>X'80'</td>
<td></td>
<td>A nonrecoverable system error occurred while processing this request.</td>
</tr>
<tr>
<td></td>
<td>X'40'</td>
<td></td>
<td>The lock is not available in the requested state. MODE=COND was specified.</td>
</tr>
<tr>
<td></td>
<td>X'20'</td>
<td></td>
<td>The request was rejected because of a deadlock.</td>
</tr>
<tr>
<td>Return Code</td>
<td>Reason Code Byte 1</td>
<td>Reason Code Byte 2</td>
<td>Description</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------------</td>
<td>-------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>X'10'</td>
<td></td>
<td></td>
<td>The lock request cannot be granted because of the failure of another DBMS that holds a retained lock in a state incompatible with the requested state of this request. This subcode is also issued when the lock cannot be granted because of an incompatibility with a lock in NOWAIT status. A lock is placed in this status when a QUIT,HELD=WORKUNIT is issued to the IRLM.</td>
</tr>
<tr>
<td>X'08'</td>
<td></td>
<td></td>
<td>The DBMS is operating in CLEANUP mode because a system failure occurred or because retained locks were deleted without a guarantee that database recovery was done. The DBMS must issue a PURGE request before any global lock request is allowed to wait.</td>
</tr>
<tr>
<td>X'01'</td>
<td></td>
<td></td>
<td>There is insufficient storage for the IRLM to process the CHANGE request. After all other subsystems identified to the IRLM have quit, terminate the IRLM and increase the storage available to the IRLM before restarting it.</td>
</tr>
<tr>
<td>X'80'</td>
<td></td>
<td></td>
<td>This request was involved in lock negotiation with other DBMSs and was denied.</td>
</tr>
<tr>
<td>X'10'</td>
<td></td>
<td></td>
<td>No more record list entries are available.</td>
</tr>
<tr>
<td>X'08'</td>
<td></td>
<td></td>
<td>An environmental error occurred in the System Lock Manager(SLM) component of MVS.</td>
</tr>
<tr>
<td>X'04'</td>
<td></td>
<td></td>
<td>At least one other work unit holds the lock with the repeatable read (RR) attribute.</td>
</tr>
<tr>
<td>X'02'</td>
<td></td>
<td></td>
<td>The work unit that submitted this lock request holds the lock with the repeatable read (RR) attribute.</td>
</tr>
<tr>
<td># 12</td>
<td>X'80'</td>
<td></td>
<td>An invalid request to change a work unit's Compatibility Class Token was issued. The value in RLPOLDCT did not match what had been specified on a previous lock or change request for this work unit.</td>
</tr>
<tr>
<td>#</td>
<td></td>
<td></td>
<td>#</td>
</tr>
<tr>
<td>#</td>
<td></td>
<td></td>
<td>#</td>
</tr>
<tr>
<td>X'40'</td>
<td></td>
<td></td>
<td>The work unit does not hold the lock.</td>
</tr>
<tr>
<td>X'20'</td>
<td></td>
<td></td>
<td>No lock exists for the specified resource hash and name values.</td>
</tr>
<tr>
<td>X'10'</td>
<td></td>
<td></td>
<td>From-duration was specified on a change single request, but the from-duration did not match the held-duration for that lock. The lock is not altered.</td>
</tr>
<tr>
<td>X'08'</td>
<td></td>
<td></td>
<td>The lock is not held in the state specified by 'fstate'.</td>
</tr>
<tr>
<td>X'04'</td>
<td></td>
<td></td>
<td>The resource is not locked by the work unit in the specified class.</td>
</tr>
<tr>
<td>Return Code</td>
<td>Reason Code Byte 1</td>
<td>Reason Code Byte 2</td>
<td>Description</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------------</td>
<td>-------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>X'02'</td>
<td></td>
<td></td>
<td>A suspended LOCK or CHANGE request exists against the lock. If ownership/duration change of a group of locks was requested, some locks might have changed before this condition was detected.</td>
</tr>
<tr>
<td>X'01'</td>
<td></td>
<td></td>
<td>The target work unit (TWU) already holds a lock or is waiting for a lock on a resource for which this request is attempting to transfer lock ownership. Ownership/duration change of other locks specified by this request might have occurred before this condition was detected.</td>
</tr>
<tr>
<td>X'80'</td>
<td>16</td>
<td></td>
<td>An invalid 'tstate' was specified. The value is greater than 11.</td>
</tr>
<tr>
<td>X'40'</td>
<td></td>
<td></td>
<td>The CLASS is invalid. The value is greater than 31.</td>
</tr>
<tr>
<td>X'20'</td>
<td></td>
<td></td>
<td>The count-by-state lock has a valid 'tstate', but the 'fstate' is zero.</td>
</tr>
<tr>
<td>X'10'</td>
<td></td>
<td></td>
<td>Both STATE and TWU were specified.</td>
</tr>
<tr>
<td>X'08'</td>
<td></td>
<td></td>
<td>STATE was specified, but TOKEN and RNA were omitted.</td>
</tr>
<tr>
<td>X'04'</td>
<td></td>
<td></td>
<td>The TOKEN is invalid. It cannot be resolved to a lock held by the specified owning work unit.</td>
</tr>
<tr>
<td>X'02'</td>
<td></td>
<td></td>
<td>The resource name length is invalid. The length is less than 2 or greater than 32 bytes.</td>
</tr>
<tr>
<td>X'01'</td>
<td></td>
<td></td>
<td>The 'fstate' is invalid for a count-by-state lock. The value is greater than 11.</td>
</tr>
<tr>
<td>X'40'</td>
<td></td>
<td></td>
<td>A target work unit was given but no owner was specified or the target &amp; owner are the same.</td>
</tr>
<tr>
<td>X'20'</td>
<td></td>
<td></td>
<td>Repeatable reader was specified and no token or resource name was given.</td>
</tr>
<tr>
<td>20</td>
<td>N/A</td>
<td></td>
<td>IRLM services are not available.</td>
</tr>
</tbody>
</table>

**IDENT request**

<table>
<thead>
<tr>
<th>Return Code</th>
<th>Reason Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>X'80'</td>
<td></td>
<td>Scope=NoDiscon specified on the irlimproc, identify is successful.</td>
</tr>
<tr>
<td>X'40'</td>
<td></td>
<td>IRLM is ARM registered</td>
</tr>
<tr>
<td>04</td>
<td>X'10'</td>
<td>Locks are held from the previous IDENT request. Locks held by the identifying DBMS from a previous failure are still in protected status.</td>
</tr>
<tr>
<td>08</td>
<td>X'80'</td>
<td>A nonrecoverable system error occurred while processing this request.</td>
</tr>
</tbody>
</table>
### LOCK request • LOCK request

<table>
<thead>
<tr>
<th>Return Code</th>
<th>Reason Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>X'40'</td>
<td></td>
<td>An MVS subsystem interface (SSI) error occurred during identification. Ensure that the 4-character IRLM name used by the subsystem to identify to the IRLM was defined as an MVS subsystem, and that the IRLM subsystem with the same name was started.</td>
</tr>
<tr>
<td>X'04'</td>
<td></td>
<td>Identify for recovery (SSTYPE=RECON) was requested, but this IRLM has no retained information about this DBMS.</td>
</tr>
<tr>
<td>X'01'</td>
<td></td>
<td>There is insufficient storage for the IRLM to process the IDENT request. After all other subsystems identified to the IRLM have quit, terminate the IRLM and increase the storage available to the IRLM before restarting it.</td>
</tr>
<tr>
<td>04 X'80'</td>
<td></td>
<td>The lock table name is invalid. It probably contains blanks.</td>
</tr>
<tr>
<td>X'40'</td>
<td></td>
<td>The SSNAME is invalid. An active DBMS in the data sharing group is already using this name.</td>
</tr>
<tr>
<td>X'20'</td>
<td></td>
<td>A required exit is missing. If a TIMEOUT exit is specified, TIMEV must be greater than 0. TIMEV is specified in the installation process.</td>
</tr>
<tr>
<td>X'10'</td>
<td></td>
<td>A read-only request is not allowed. Locks are retained for this DBMS.</td>
</tr>
<tr>
<td>X'08'</td>
<td></td>
<td>This request violates the single DB2/IRLM rule.</td>
</tr>
<tr>
<td>X'04'</td>
<td></td>
<td>The address of the BACKUP subsystem name pointed to inaccessible storage.</td>
</tr>
<tr>
<td>X'02'</td>
<td></td>
<td>This IRLM does not support the requested function level. A probable cause is the version/release of this IRLM does not support this version/release of DB2. IRLM is back-level.</td>
</tr>
<tr>
<td>X'01'</td>
<td></td>
<td>The IRLM failed to connect to the data sharing group and abended. After fixing the connection error, reconnect the IRLM to the data sharing group.</td>
</tr>
<tr>
<td>20 N/A</td>
<td></td>
<td>IRLM services are not available.</td>
</tr>
</tbody>
</table>

### LOCK request

<table>
<thead>
<tr>
<th>Return Code</th>
<th>Reason Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>04 X'80'</td>
<td></td>
<td>A restart lock successfully reacquired a retained lock.</td>
</tr>
<tr>
<td>X'40'</td>
<td></td>
<td>Modify lock granted but no record list entry created.</td>
</tr>
<tr>
<td>X'20'</td>
<td></td>
<td>Other lock holders exist.</td>
</tr>
<tr>
<td>X'10'</td>
<td></td>
<td>The lock is already held.</td>
</tr>
<tr>
<td>X'08'</td>
<td></td>
<td>This lock was involved in a deadlock, but was not selected as a victim.</td>
</tr>
<tr>
<td>X'04'</td>
<td></td>
<td>Another work unit holds the lock private.</td>
</tr>
<tr>
<td>X'04'</td>
<td></td>
<td>At least one other work unit holds the lock with the repeatable read (RR) attribute.</td>
</tr>
<tr>
<td>X'02'</td>
<td></td>
<td>The work unit that submitted this lock request holds the lock with the repeatable read (RR) attribute.</td>
</tr>
</tbody>
</table>
## LOCK request • LOCK request

<table>
<thead>
<tr>
<th>Return Code</th>
<th>Reason Code Byte 1</th>
<th>Reason Code Byte 2</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>08</td>
<td>X’80’</td>
<td></td>
<td>A nonrecoverable system error occurred while processing this request.</td>
</tr>
<tr>
<td></td>
<td>X’40’</td>
<td></td>
<td>The lock is not available in the requested state. MODE=COND was specified.</td>
</tr>
<tr>
<td></td>
<td>X’20’</td>
<td></td>
<td>The request was rejected because of a deadlock or timeout.</td>
</tr>
<tr>
<td></td>
<td>X’10’</td>
<td></td>
<td>The lock request cannot be granted because of the failure of another DBMS that holds a retained lock in a state incompatible with the requested state of this request. This subcode is also issued when the lock cannot be granted because of an incompatibility with a lock in NOWAIT status. A lock is placed in this status when a QUIT,HELD=WORKUNIT is issued to the IRLM.</td>
</tr>
<tr>
<td></td>
<td>X’08’</td>
<td></td>
<td>The DBMS is operating in CLEANUP mode because a system failure occurred or because retained locks were deleted without a guarantee that database recovery was done. The DBMS must issue a PURGE request before any global lock request is allowed to wait. The same reason code is presented if the LOCK request is canceled by a SYNC request.</td>
</tr>
<tr>
<td></td>
<td>X’04’</td>
<td></td>
<td>Another holder holds the restart lock in an incompatible state.</td>
</tr>
<tr>
<td></td>
<td>X’02’</td>
<td></td>
<td>The maximum number of locks that can be held by this work unit was exceeded. The LOCKMAX parameter specifies the maximum.</td>
</tr>
<tr>
<td></td>
<td>X’01’</td>
<td></td>
<td>There is insufficient storage for the IRLM to process the LOCK request. After all other subsystems identified to the IRLM have quit, terminate the IRLM and increase the storage available to the IRLM before restarting it.</td>
</tr>
<tr>
<td></td>
<td>X’80’</td>
<td></td>
<td>This request was involved in lock negotiation with other DBMSs and was denied.</td>
</tr>
<tr>
<td></td>
<td>X’10’</td>
<td></td>
<td>No more record list entries are available.</td>
</tr>
<tr>
<td></td>
<td>X’08’</td>
<td></td>
<td>An environmental error occurred in the System Lock Manager (SLM) component of MVS.</td>
</tr>
<tr>
<td></td>
<td>X’04’</td>
<td></td>
<td>The lock is held by at least one other work unit with the repeatable read (RR) attribute.</td>
</tr>
<tr>
<td></td>
<td>X’02’</td>
<td></td>
<td>The lock is held with the repeatable read (RR) attribute by the work unit that submitted this request.</td>
</tr>
<tr>
<td>12</td>
<td>X’80’</td>
<td></td>
<td>An INDOUBT request was specified but either the retained lock for this does not exist, or this is a child resource.</td>
</tr>
<tr>
<td></td>
<td>X’80’</td>
<td></td>
<td>A work unit within this IRLM already holds the P-lock. Only one owning work unit is allowed to hold interest in a P-lock within an IRLM.</td>
</tr>
</tbody>
</table>
### NOTIFY request

<table>
<thead>
<tr>
<th>Return Code</th>
<th>Reason Code Byte 1</th>
<th>Reason Code Byte 2</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>#</td>
<td>X'40'</td>
<td></td>
<td>An illegal attempt was made to change a Compatibility Class Token (CCT). A previous lock or change request had specified a CCT (non-zero) and the most recent request specified a CCT that did not match.</td>
</tr>
<tr>
<td>16</td>
<td>X'40'</td>
<td></td>
<td>The CLASS is invalid. The value is greater than 31.</td>
</tr>
<tr>
<td>X'20'</td>
<td></td>
<td></td>
<td>The STATE is invalid. The value is 0 or greater than 11.</td>
</tr>
<tr>
<td>X'08'</td>
<td></td>
<td></td>
<td>The SCOPE is invalid. A previous request defined a different SCOPE for the resource.</td>
</tr>
<tr>
<td>X'04'</td>
<td></td>
<td></td>
<td>The TOKEN or PARENT TOKEN is invalid.</td>
</tr>
<tr>
<td>X'02'</td>
<td></td>
<td></td>
<td>The resource name (RNA) length is invalid. The length specified is less than 2 or greater than 32 bytes.</td>
</tr>
<tr>
<td>X'01'</td>
<td></td>
<td></td>
<td>An invalid retained state was specified. The retained state is greater than the requested state. If the lock was granted and then retained, it could exist in an incompatible state with other holders.</td>
</tr>
<tr>
<td>X'0080'</td>
<td></td>
<td></td>
<td>TYPE=SINGLE lock request specified but:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• It is not a P-lock or</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• a Compatibility class token was also specified or</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• a parent was also specified</td>
</tr>
<tr>
<td>20</td>
<td>N/A</td>
<td></td>
<td>IRLM services are not available.</td>
</tr>
</tbody>
</table>

### NOTIFY request

<table>
<thead>
<tr>
<th>Return Code</th>
<th>Reason Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>04</td>
<td>X'80'</td>
<td>An asynchronous request was accepted.</td>
</tr>
<tr>
<td></td>
<td>X'40'</td>
<td>The receiver returned additional return code information to the requester.</td>
</tr>
<tr>
<td></td>
<td>X'20'</td>
<td>A selective notify request was made, but there were no DBMSs with the right qualifications to receive this request.</td>
</tr>
<tr>
<td></td>
<td>X'02'</td>
<td>One or more DBMSs holding locks failed and could not be notified.</td>
</tr>
<tr>
<td>08</td>
<td>X'80'</td>
<td>A nonrecoverable system error occurred while processing this request.</td>
</tr>
<tr>
<td></td>
<td>X'01'</td>
<td>There is insufficient storage for the IRLM to process the NOTIFY request. After all other subsystems identified to the IRLM have quit, terminate the IRLM and increase the storage available to the IRLM before restarting it.</td>
</tr>
<tr>
<td></td>
<td>X'08'</td>
<td>NOTIFY request is purged by sync.</td>
</tr>
<tr>
<td>12</td>
<td>X'40'</td>
<td>The lock is not held by the specified owning work unit.</td>
</tr>
<tr>
<td></td>
<td>X'20'</td>
<td>No lock exists for the specified resource hash and name values.</td>
</tr>
<tr>
<td></td>
<td>X'10'</td>
<td>The target DBMS name is not known to IRLM.</td>
</tr>
<tr>
<td>Return Code</td>
<td>Reason Code</td>
<td>Description</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------</td>
<td>-------------</td>
</tr>
<tr>
<td>16</td>
<td>X'80'</td>
<td>The message area address is invalid.</td>
</tr>
<tr>
<td></td>
<td>X'08'</td>
<td>The message length is zero.</td>
</tr>
<tr>
<td></td>
<td>X'04'</td>
<td>The TOKEN is invalid.</td>
</tr>
<tr>
<td></td>
<td>X'02'</td>
<td>An invalid resource name was specified. The length is less than 2 or greater than 32 bytes.</td>
</tr>
<tr>
<td>20</td>
<td>N/A</td>
<td>IRLM services are not available.</td>
</tr>
</tbody>
</table>

**PLEXIT request**

<table>
<thead>
<tr>
<th>Return Code</th>
<th>Reason Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>X'80'</td>
<td>The P-lock exit was already enabled.</td>
</tr>
<tr>
<td></td>
<td>X'40'</td>
<td>The P-lock exit was already disabled.</td>
</tr>
<tr>
<td>8</td>
<td>X'80'</td>
<td>A nonrecoverable system error occurred while processing this request.</td>
</tr>
<tr>
<td></td>
<td>X'01'</td>
<td>There is insufficient storage for the IRLM to process the PLEXIT request. After all other subsystems identified to the IRLM have quit, terminate the IRLM and increase the storage available to the IRLM before restarting it.</td>
</tr>
<tr>
<td>12</td>
<td>X'40'</td>
<td>The P-lock exit was not defined at IDENTIFY time.</td>
</tr>
<tr>
<td>20</td>
<td>N/A</td>
<td>IRLM services are not available.</td>
</tr>
</tbody>
</table>

**PURGE request**

<table>
<thead>
<tr>
<th>Return Code</th>
<th>Reason Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>04</td>
<td>X'10'</td>
<td>The locks are already released.</td>
</tr>
<tr>
<td></td>
<td>X'08'</td>
<td>The PURGE-required count was decremented.</td>
</tr>
<tr>
<td>08</td>
<td>X'80'</td>
<td>A nonrecoverable system error occurred while processing this request.</td>
</tr>
<tr>
<td></td>
<td>X'01'</td>
<td>There is insufficient storage for the IRLM to process the PURGE request. After all other subsystems identified to the IRLM have quit, terminate the IRLM and increase the storage available to the IRLM before restarting it.</td>
</tr>
<tr>
<td>12</td>
<td>X'80'</td>
<td>A PURGE TYPE=TAKEOVER was issued, but the requester did not issue a corresponding TAKEOVER request.</td>
</tr>
<tr>
<td></td>
<td>X'40'</td>
<td>A PURGE TYPE=SFAIL was issued, but this IRLM is still part of the data sharing group. An IRLM cannot be in system failed state while it is part of a data sharing group. This code indicates that IMS has invalid information about its status in the group.</td>
</tr>
<tr>
<td></td>
<td>X'20'</td>
<td>A PURGE-BY-WORK-UNIT was issued but no owning work unit was specified.</td>
</tr>
</tbody>
</table>
## QUERY request

<table>
<thead>
<tr>
<th>Return Code</th>
<th>Reason Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>04</td>
<td>X'80'</td>
<td>There is no information meeting the criteria of the specified parameters.</td>
</tr>
<tr>
<td></td>
<td>X'01'</td>
<td>The QUERY request did not specify an area large enough to contain all the data requested.</td>
</tr>
<tr>
<td>08</td>
<td>X'80'</td>
<td>A nonrecoverable system error occurred while processing this request.</td>
</tr>
<tr>
<td></td>
<td>X'01'</td>
<td>There is insufficient storage for the IRLM to process the QUERY request. After all other subsystems identified to the IRLM have quit, terminate the IRLM and increase the storage available to the IRLM before restarting it.</td>
</tr>
<tr>
<td>16</td>
<td>X'80'</td>
<td>The AREA address is invalid or zero.</td>
</tr>
<tr>
<td></td>
<td>X'40'</td>
<td>An invalid continuation token was specified.</td>
</tr>
<tr>
<td></td>
<td>X'08'</td>
<td>The AREA length is invalid. The AREA length is less than 4.</td>
</tr>
<tr>
<td></td>
<td>X'04'</td>
<td>The TOKEN is invalid. The TOKEN value does not correspond to an existing lock, or the lock is not held by the designated work unit.</td>
</tr>
<tr>
<td></td>
<td>X'02'</td>
<td>The resource name length is invalid. The length specified is less than 2 or greater than 32 bytes.</td>
</tr>
<tr>
<td></td>
<td>X'01'</td>
<td>The DATA=RETAIN parameter is invalid. SCOPE=WU, OWU, or TOKEN was specified.</td>
</tr>
<tr>
<td>20</td>
<td>N/A</td>
<td>IRLM services are not available.</td>
</tr>
</tbody>
</table>

## QUIT request

<table>
<thead>
<tr>
<th>Return Code</th>
<th>Reason Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>04</td>
<td>X'10'</td>
<td>Modify locks are retained.</td>
</tr>
<tr>
<td>08</td>
<td>X'80'</td>
<td>A nonrecoverable system error occurred while processing this request.</td>
</tr>
<tr>
<td></td>
<td>X'01'</td>
<td>There is insufficient storage for the IRLM to process the QUIT request. After all other subsystems identified to the IRLM have quit, terminate the IRLM and increase the storage available to the IRLM before restarting it.</td>
</tr>
</tbody>
</table>
### RETLOCK request

<table>
<thead>
<tr>
<th>Return Code</th>
<th>Reason Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>X'80'</td>
<td>The owning work unit (OWU) specified on a HELD=WORKUNIT request was not found.</td>
</tr>
<tr>
<td></td>
<td>X'40'</td>
<td>The owning work unit (OWU) parameter was not specified on a HELD=WORKUNIT request.</td>
</tr>
<tr>
<td></td>
<td>X'20'</td>
<td>A QUIT HELD=RETAIN request was already processed.</td>
</tr>
<tr>
<td></td>
<td>X'10'</td>
<td>This IRLM has no knowledge of this DBMS. Either a QUIT HELD=RELEASE was already processed or the DBMS was never identified to this IRLM.</td>
</tr>
<tr>
<td>20</td>
<td>N/A</td>
<td>IRLM services are not available.</td>
</tr>
</tbody>
</table>

### STAT request

<table>
<thead>
<tr>
<th>Return Code</th>
<th>Reason Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>X'80'</td>
<td>A nonrecoverable system error occurred while processing this request.</td>
</tr>
<tr>
<td></td>
<td>X'01'</td>
<td>There is insufficient storage for the IRLM to process the STAT request. After all other subsystems identified to the IRLM have quit, terminate the IRLM and increase the storage available to the IRLM before restarting it.</td>
</tr>
<tr>
<td>12</td>
<td>X'80'</td>
<td>The SSNAME specified a subsystem not identified to this IRLM.</td>
</tr>
<tr>
<td>16</td>
<td>X'80'</td>
<td>The AREA address is invalid or zero.</td>
</tr>
<tr>
<td></td>
<td>X'08'</td>
<td>The AREA length is invalid.</td>
</tr>
<tr>
<td>20</td>
<td>N/A</td>
<td>IRLM services are not available.</td>
</tr>
</tbody>
</table>

### SYNC request
## TAKEOVER request

<table>
<thead>
<tr>
<th>Return Code</th>
<th>Reason Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>X'80'</td>
<td>A nonrecoverable system error occurred while processing this request.</td>
</tr>
<tr>
<td>4</td>
<td>X'08'</td>
<td>At least one request matched the cancel criteria and was canceled by IRML.</td>
</tr>
<tr>
<td></td>
<td>X'01'</td>
<td>There is insufficient storage for the IRLM to process the SYNC request. After all other subsystems identified to the IRLM have quit, terminate the IRLM and increase the storage available to the IRLM before restarting it.</td>
</tr>
<tr>
<td>12</td>
<td>X'80'</td>
<td>CANCEL=YES was specified, but the work unit held no locks.</td>
</tr>
<tr>
<td></td>
<td>X'40'</td>
<td>The caller specified RESUME=NO but did not give the TGET RLPL of the request to cancel.</td>
</tr>
<tr>
<td>14</td>
<td>X'10'</td>
<td>The work unit was not found.</td>
</tr>
<tr>
<td>20</td>
<td>N/A</td>
<td>IRLM services are not available.</td>
</tr>
</tbody>
</table>

## UNLOCK request

<table>
<thead>
<tr>
<th>Return Code</th>
<th>Reason Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>04</td>
<td>X'80'</td>
<td>One or more locks are held. Some locks did not satisfy the generic resource specification.</td>
</tr>
<tr>
<td></td>
<td>X'20'</td>
<td>Additional locks are held in other states. This applies only to count-by-state locks.</td>
</tr>
<tr>
<td>Return Code</td>
<td>Reason Code</td>
<td>Description</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------</td>
<td>-------------</td>
</tr>
<tr>
<td>X'10'</td>
<td></td>
<td>The IRLM cannot release one or more parent locks because child locks exist.</td>
</tr>
<tr>
<td>X'08'</td>
<td></td>
<td>The lock was not fully released.</td>
</tr>
<tr>
<td>X'04'</td>
<td></td>
<td>The work unit holds locks in other classes.</td>
</tr>
<tr>
<td>X'02'</td>
<td></td>
<td>Locks could not be released because the duration specified on the request was lower than the duration previously set.</td>
</tr>
<tr>
<td>X'01'</td>
<td></td>
<td>A nonrecoverable system error occurred while processing this request.</td>
</tr>
<tr>
<td>X'40'</td>
<td></td>
<td>A P-lock conditional request would have had to wait on a held resource latch. The resource latch could have been held by an in-progress P-lock negotiation or a Notify with Latch request.</td>
</tr>
<tr>
<td>X'01'</td>
<td></td>
<td>There is insufficient storage for the IRLM to process the UNLOCK request. After all other subsystems identified to the IRLM have quit, terminate the IRLM and increase the storage available to the IRLM before restarting it.</td>
</tr>
<tr>
<td>12</td>
<td>X'40'</td>
<td>The work unit does not hold the lock.</td>
</tr>
<tr>
<td>X'20'</td>
<td></td>
<td>No lock exists for the specified resource hash and name values.</td>
</tr>
<tr>
<td>X'10'</td>
<td></td>
<td>The IRLM cannot release the parent lock because child locks exist.</td>
</tr>
<tr>
<td>X'08'</td>
<td></td>
<td>The lock is not held in the specified STATE.</td>
</tr>
<tr>
<td>X'04'</td>
<td></td>
<td>The lock is not held in the specified class.</td>
</tr>
<tr>
<td>16</td>
<td>X'40'</td>
<td>The CLASS is invalid. The value is greater than 31.</td>
</tr>
<tr>
<td>X'20'</td>
<td></td>
<td>The STATE is invalid. The value is greater than 11.</td>
</tr>
<tr>
<td>X'10'</td>
<td></td>
<td>The owning work unit (OWU) parameter is not specified.</td>
</tr>
<tr>
<td>X'04'</td>
<td></td>
<td>The TOKEN is invalid.</td>
</tr>
<tr>
<td>X'02'</td>
<td></td>
<td>The resource name (RNA) length is invalid. The length specified is less than 2 or greater than 32 bytes.</td>
</tr>
<tr>
<td>X'01'</td>
<td></td>
<td>TYPE=GENERIC was specified, but no resource name (RNA) was specified.</td>
</tr>
<tr>
<td>20</td>
<td>N/A</td>
<td>IRLM services are not available.</td>
</tr>
</tbody>
</table>

**VERIFY request**

<table>
<thead>
<tr>
<th>Return Code</th>
<th>Reason Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>X'80'</td>
<td>At least one entry in the VERIFY list was not known to IRLM.</td>
</tr>
<tr>
<td>X'40'</td>
<td></td>
<td>IRLM recognized at least one entry in the VERIFY list, but the entry did not have matching DBRC RECON status.</td>
</tr>
<tr>
<td>Return Code</td>
<td>Reason Code</td>
<td>Description</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------</td>
<td>-------------</td>
</tr>
<tr>
<td>08</td>
<td>X'80'</td>
<td>A nonrecoverable system error occurred while processing this request.</td>
</tr>
<tr>
<td></td>
<td>X'01'</td>
<td>There is insufficient storage for the IRLM to process the VERIFY request. After all other subsystems identified to the IRLM have quit, terminate the IRLM and increase the storage available to the IRLM before restarting it.</td>
</tr>
<tr>
<td>16</td>
<td>X'80'</td>
<td>The VERIFY SSNAREA area address is invalid.</td>
</tr>
<tr>
<td>20</td>
<td>N/A</td>
<td>IRLM services are not available.</td>
</tr>
</tbody>
</table>
IRLM Abend Reason Codes

2017
Explanation: This is an internal error. IRLM processing of a request from a database management system (DBMS) failed. The IRLM issues console message DXR123E containing the error ID.

System Action: The IRLM terminates abnormally. An SDUMP of the IRLM address space is requested.

System Programmer Response: Obtain the SDUMP and check the error ID in the message. Contact the IBM Support Center for help in determining the problem.

Problem Determination: The problem usually is a program check within the IRLM code. The dump title includes a module name and an offset into the module where the ABEND was issued.

2018
Explanation: An unrecoverable error occurred during IRLM initialization. The IRLM issues console message DXR116E containing an error code.

System Action: The IRLM terminates abnormally. An SDUMP of the IRLM address space is requested for some of the error codes.

System Programmer Response: Analyze the error code in message DXR116E to determine the reason for this failure. If you are unable to resolve the problem, contact the IBM Support Center.

2019
Explanation: This is an internal error. The IRLM detected either a destroyed storage pool or an invalid request. The IRLM issues message DXR122E to the console.

System Action: The IRLM terminates abnormally. An SDUMP of the IRLM address space is requested.

System Programmer Response: Obtain the SDUMP and contact the IBM Support Center for help in determining the problem.

Problem Determination: The dump title includes a module name and an offset into the module where the ABEND was issued.

2020
Explanation: The MVS operator requested an abnormal termination of the IRLM. The IRLM issues message DXR124E to the console.

System Action: The IRLM is terminated abnormally. If the NODUMP parameter was omitted from the command, an SDUMP is requested.

System Programmer Response: The SDUMP shows the status of the IRLM.

2022
Explanation: This is an internal error. IRLM issues this abend because one of its subtasks abended. The IRLM issues message DXR122E to the console.

System Action: The IRLM terminates abnormally. An SDUMP of the IRLM address space is requested.

System Programmer Response: Obtain the SDUMP and contact the IBM Support Center for help in determining the problem.

Problem Determination: The dump title includes a module name and an offset into the module where the ABEND was issued.

2023
# Explanation: The IRLM encountered an out-of-storage condition either from a logic error, a subsystem definition error, or an error from an MVS service that must be performed for the IRLM to continue processing. The IRLM message DXR175E is issued to the console to help identify the error, followed by the DXR122E message describing the abend.

System Action: The IRLM terminates abnormally. An SDUMP of the IRLM address space is requested and will be issued unless superceded or suppressed.

System Programmer Response: From the information in message DXR175E, determine what storage was in error and what the probable cause is. If IBM Service is required, obtain the SDUMP and contact the IBM Support Center for help in determining the problem.

Problem Determination: The dump title includes a module name and an offset into the module where the ABEND was issued.

2024
Explanation: This is an internal error. The database management system (DBMS) parameter list is invalid.

System Action: The requesting DBMS is abended with user abend 2024. The IRLM continues processing.

System Programmer Response: Obtain the dump of the requesting DBMS and contact the IBM Support Center for assistance.

2025
Explanation: This is an internal error. An IRLM request to MVS failed with an unexpected reason code. The IRLM issues message DXR139E to the console with the failing return and reason codes. Message DXR122I is also issued.

System Action: The IRLM terminates abnormally. An SDUMP of the IRLM address space is requested.

System Programmer Response: Obtain the SDUMP and contact the IBM Support Center for help in determining the problem.

Problem Determination: The dump title includes a module name and an offset into the module where the ABEND was issued.
2027

**Explanation:** This is an internal error. The IRLM detected a logical inconsistency in either its processing or the local lock structure. IRLM issues message DXR122E to the console.

**System Action:** The IRLM terminates abnormally. An SDUMP of the IRLM address space is requested.

**System Programmer Response:** Obtain the SDUMP and contact the IBM Support Center for help in determining the problem.

**Problem Determination:** The dump title includes a module name and an offset into the module where the ABEND was issued.

2031

**Explanation:** This is an internal error. The IRLM requested that MVS terminate the IRLM address space because of a previous error. The IRLM issues message DXR122E to the console.

**System Action:** The IRLM terminates abnormally. An SDUMP of the IRLM address space is requested.

**System Programmer Response:** Obtain the SDUMP and contact the IBM Support Center for help in determining the problem.

**Problem Determination:** The dump title includes a module name and an offset into the module where the ABEND was issued.
SNA Sense Codes

This section describes the SNA sense codes issued by the DB2 product when an error is detected on an LU6.2 conversation. We have also included some SNA sense codes which DB2 does not issue but users often have trouble diagnosing.

There are many SNA sense codes that are not described in this book. For information concerning the SNA sense codes that are not included, refer to *SNA Formats*.

**080F6051**

**Explanation:** An attempt to allocate a VTAM LU6.2 conversation failed because the remote site did not accept the security information contained in the SNA FMH5.

This abend reason code is issued by the following CSECTs:

- DSNLAGNT
- DSNLTACC
- DSNLTEXC
- DSNLVF5

**System Action:** The attempt to access the remote database resource fails, and the failure is reported to the application.

A DSNL032I message might have been written to the console. Refer to the description of this message for further information.

**User Response:** Notify the communications database administrator.

**System Programmer Response:** If the remote site is a DB2 subsystem, refer to the DSNL030I message at the remote site for the cause of the security failure. Additionally, an ALERT is recorded in NetView (if the NetView product is available) to describe the security failure.

If the remote site is not a DB2 subsystem, obtain any diagnostic information about the security failure at the remote site.

Verify each of the following:

- The USERNAMES column of the SYSIBM.LUNAMES table at the local DB2 system must specify either ‘O’ or ‘B’, if you intend authorization IDs and PASSWORDs to be sent on LU6.2 ALLOCATE requests to the remote site.
- The authorization ID and PASSWORD sent on the LU6.2 ALLOCATE request are specified correctly in the SYSIBM.USERNAMES table.
- If you intend to translate the authorization IDs, insuire the NEWAUTHID column of the SYSIBM.USERNAMES table is the authorization ID to be used at the remote site.
- If password encryption is used (ENCRIPTPSWDS='Y' in the SYSIBM.LUNAMES table), the remote site must be a DB2 subsystem.
- The ENCRYPTPSWDS column of the SYSIBM.LUNAMES table must be correctly set at both the local and remote DB2 subsystems.
- The correct password is set to the remote site.

1. For encrypted passwords, the password sent to the remote DB2 subsystem is obtained by extracting the password from the local security subsystem of the authorization ID in the NEWAUTHID column of the SYSIBM.USERNAMES.

2. If password encryption is not used, the password is taken from the PASSWORD column of the SYSIBM.USERNAMES table.

**Problem Determination:** Collect the following diagnostic items listed in [Appendix B, “Problem determination” on page 1051](#): 1, 58, 59, 83.

**080F6052**

**Explanation:** An attempt to allocate a VTAM LU6.2 conversation failed because the security subfields in the FMH5 were not formatted as required by the LU6.2 architecture.

This abend reason code is issued by the following CSECTs: DSNLAGNT, DSNLVF5.

**System Action:** The attempt to access the remote database resource fails, and the failure is reported to the SQL application.

**Programmer Response:** Contact the administrator for the client system. The client system might have a software defect.

**080FFF00**

**Explanation:** An attempt to allocate a VTAM LU6.2 conversation failed because the password supplied to the server has expired.

This abend reason code is issued by the following CSECTs: DSNLAGNT, DSNLVF5.

**System Action:** The attempt to access the remote database resource fails, and the failure is reported to the SQL application.

**Programmer Response:** Change the password at the remote database server, so that the password is no longer expired.

**Problem Determination:** If updating the password does not correct the problem, collect the following diagnostic items listed in [Appendix B, “Problem determination” on page 1051](#): 1, 58, 59, 83.

**080FFF01**

**Explanation:** An attempt to allocate a VTAM LU6.2 conversation failed because the password supplied to the server was incorrect.

This abend reason code is issued by the following CSECTs: DSNLAGNT, DSNLVF5.

**System Action:** The attempt to access the remote database resource fails, and the failure is reported to the SQL application.

**User Response:** Supply the correct password on the connection request.

**Problem Determination:** If supplying the correct password does not fix the problem, collect the following diagnostic items listed in [Appendix B, “Problem determination” on page 1051](#): 1, 58, 59, 83.
**Explanation:** An attempt to allocate a VTAM LU6.2 conversation failed because the userid specified on the request was revoked at the server system.

This abend reason code is issued by the following CSECTs: DSNLAGNT, DSNLVPF5.

**System Action:** The attempt to access the remote database resource fails, and the failure is reported to the SQL application.

**User Response:** Contact the security administrator at the server to have your userid re-activated.

**Problem Determination:** If reactivating the userid does not correct the problem, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 58, 59, 83.

---

**Explanation:** An attempt to allocate a VTAM LU6.2 conversation failed because the userid supplied to the server was invalid.

This abend reason code is issued by the following CSECTs: DSNLAGNT, DSNLVPF5.

**System Action:** The attempt to access the remote database resource fails, and the failure is reported to the SQL application.

**User Response:** Supply a valid userid on your connection request.

**Problem Determination:** If the problem cannot be correct by changing the userid, collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 58, 59, 83.

---

**Explanation:** An attempt to allocate a VTAM LU6.2 conversation failed because no userid was present in the connection request.

This abend reason code is issued by the following CSECTs: DSNLAGNT, DSNLVPF5.

**System Action:** The attempt to access the remote database resource fails, and the failure is reported to the SQL application.

**Programmer Response:** Contact the administrator of the client system. The client must be configured to include a userid on connection requests.

---

**Explanation:** An attempt to allocate a VTAM LU6.2 conversation failed because a password was not supplied in the connection request.

This abend reason code is issued by the following CSECTs: DSNLAGNT, DSNLVPF5.

**System Action:** The attempt to access the remote database resource fails, and the failure is reported to the SQL application.

**Programmer Response:** Contact the administrator of the client system. The client must be configured to transmit a password in the connection request.

This is known in LU6.2 as SECURITY=PGM on the ALLOCATE verb.

---

**Explanation:** A VTAM LU6.2 conversation was terminated due to a resource shortage.

This abend reason code is issued by the following CSECTs: DSNLAGNT, DSNLTACC, DSNLTEXC.

**System Action:** The LU6.2 conversation is terminated.

**User Response:** Notify the systems programmer.

**System Programmer Response:** If the site issuing this sense code is a DB2 subsystem, refer to the DSNL030I message at the DB2 site for the cause of the failure.

If the remote site is not a DB2 subsystem, obtain any diagnostic information about the resource shortage at the remote site.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1.

---

**Explanation:** A VTAM LU6.2 conversation was terminated due to a resource shortage.

This abend reason code is issued by the following CSECT: DSNLVRPL.

**System Action:** The LU6.2 conversation is terminated.

**User Response:** Notify the systems programmer.

**System Programmer Response:** If the site issuing this sense code is a DB2 system, refer to the DSNL500I message at the DB2 site for the cause of the failure.

If the remote site is not a DB2 subsystem, obtain any diagnostic information about the resource shortage at the remote site.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1.

---

**Explanation:** A VTAM LU6.2 conversation was terminated due to a resource shortage.

This abend reason code is issued by the following CSECTs: DSNLAGNT, DSNLTACC, DSNLTEXC.

**System Action:** The LU6.2 conversation is terminated.

**User Response:** Notify the systems programmer.

**System Programmer Response:** If the server site issuing this sense code is a DB2 system, refer to the DSNL030I message at the DB2 site for the cause of the failure.

If the remote site is not a DB2 subsystem, obtain any diagnostic information about the resource shortage at the remote site.

**Problem Determination:** Collect the following diagnostic item listed in Appendix B, “Problem determination” on page 1051: 1.
08570008

Explanation: A VTAM LU6.2 conversation is not allowed because the LU session required for the processing of the request is not active.

This sense code is issued by the following CSECTs:
DSNLVRPL.

System Action: The LU6.2 conversation is terminated.

User Response: Notify the system programmer about the network failure.

System Programmer Response: If the server site issuing this sense code is a DB2 subsystem, make sure DDF is started.

If the remote site is not a DB2 subsystem, obtain any diagnostic information about the inactive LU at the remote site.

Problem Determination: Collect the following diagnostic items listed in [Appendix B, “Problem determination” on page 1051] 1.

08640000

Explanation: A DEALLOCATE TYPE(ABEND_PROG) verb was issued to terminate the LU6.2 conversation. This occurs when an unrecoverable error was detected during distributed database processing.

This abend reason code is issued by the following CSECTs:
DSNLAGNT DSNLCCDN DSNLRTD DSNLXAN
DSNLCRTRC DSNLTDAC DSNLSTRX DSNLVRF5

System Action: An error was encountered which required the LU6.2 conversation to be terminated abnormally. The conversation is terminated using DEALLOCATE TYPE(ABEND_PROG), which is detected as a communication error at the remote site.

User Response: Notify the systems programmer.

System Programmer Response: Look for messages or SVC dumps at the site which issued the DEALLOCATE TYPE(ABEND_PROG).

Problem Determination: Collect the following diagnostic items listed in [Appendix B, “Problem determination” on page 1051] 1.

08640001

Explanation: A DEALLOCATE TYPE(ABEND_SVC) verb was issued to terminate the LU6.2 conversation. This occurs when a remote system encounters an unrecoverable error in attempting to satisfy a distributed database request.

This abend reason code is issued by the following CSECTs:
DSNLVRQX DSNLVRWX DSNLVXAN

System Action: An error was encountered which required the LU6.2 conversation to be terminated abnormally. The conversation is terminated using DEALLOCATE TYPE(ABEND_SVC), which is detected as a communication error at the remote site.

User Response: If the site issuing the DEALLOCATE TYPE(ABEND_SVC) is a DB2 subsystem, that DB2 site is in the process of stopping the distributed data facility (DDF). You must retry your request once DDF is restarted at that site.

System Programmer Response: If the site issuing DEALLOCATE TYPE(ABEND_SVC) was not coming down, look for messages or SVC dumps at that site that would cause the conversation to be terminated.

Problem Determination: Collect the following diagnostic items listed in [Appendix B, “Problem determination” on page 1051] 1.

08640002

Explanation: An SNA conversation was terminated with an SNA ABEND_TIMER indication.

This abend reason code is issued by the following CSECT: DSNLVDDC.

System Action: When communication with the coordinator of a unit of work fails and the commit/abort decision has not yet been received, DB2 uses the X’08640002’ SNA sense code to terminate conversations with all other LUs involved in the unit of work. This informs the other LUs in the unit of work that a 2-phase commit communication outage occurred. All LUs involved in the unit of work are still able to determine the outcome of the unit of work, because either DB2 or the remote system performs the SNA resynchronization protocol to determine the coordinator’s decision (commit or abort) for the unit of work.

System Programmer Response: No action is required.

10086011

Explanation: An invalid LUWID value was detected in the data received from a remote site. When a remote site sends a request using application-directed access, the first portion of the data contains an SNA FMH5 header. This header contains the invalid LUWID.

This abend reason code is issued by the following CSECT: DSNLVRF5.

System Action: The attempt to allocate an APPC conversation is rejected.

A DSNL032I message might have been written to the console. Refer to the description of this message for further information.

User Response: Notify the systems programmer.

System Programmer Response: The remote site is required to send a valid LUWID value when using application-directed access.

Verify that the remote site issuing this request is indeed attempting to start a conversation using application-directed access. It is possible that the remote site mistakenly attempted to start a conversation with DB2, using the transaction program name (TPN).

If the remote site is attempting to start a conversation using application-directed access, contact the support group for the remote site to determine why an invalid LUWID is being transmitted.

Problem Determination: Collect the following diagnostic items listed in [Appendix B, “Problem determination” on page 1051] 1, 58, 59, 83.
**10086021**

**Explanation:** A remote site sent a request that specifies an unknown transaction program name (TPN). The first message in the request contains an SNA FMH5 header, which specifies the TPN to be used.

This abend reason code is issued by the following CSECT: DSNLVPF5

**System Action:** The attempt to allocate an APPC conversation is rejected.

A DSNL032I message might have been written to the console. Refer to the description of this message for further information.

**User Response:** Notify the systems programmer.

**System Programmer Response:** This error is usually caused by one of these errors:

- DB2 returns this sense code to an application at a remote site when the application mistakenly routes an LU6.2 ALLOCATE request to DB2. In most cases, the remote site selected the wrong partner LU name (DB2’s LU name) on the LU6.2 ALLOCATE verb.
- A DB2 server received an invalid Transaction Program Name (TPN) from a DRDA requester. The only DRDA TPN that DB2 considers valid is 'X’07F6C4C2’.
- If DB2 receives this sense code from a remote site, one of the following can potentially be the cause:
  1. If you are using application-directed access, the remote site does not support application-directed access. This can occur if the remote site is a DB2 Version 2 Release 2 system, which does not support application-directed access.
  2. If you are using system-directed access, the remote site issues this sense code if it is not another DB2 site. System-directed access is only supported between DB2 subsystems. Other systems do not support this function.
  3. The SYSIBM.LOCATIONS table does not specify the correct LUNAME value for your intended destination. This causes VTAM to route your request to the wrong site, which probably does not support distributed database functions.
  4. The remote site does not support distributed two-phase commit protocols, but the VTAM APPL definition for the remote LU specifies that two-phase commit protocols are supported. This can occur if the remote site is a DB2 Version 2 system which has SYNCLVL=SYNCPPOINT specified in its VTAM APPL definition. For DB2 Version 2 systems, the VTAM APPL definition statement should specify SYNCLVL=CONFIRM (the default), since DB2 Version 2 systems do not support distributed two-phase commit protocols.

If none of the above explains the failure, you must contact the support group for the remote site to determine why an invalid TPN is being transmitted.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 58, 59, 83.

---

**10086031**

**Explanation:** A remote site rejected a request using system-directed access because it contained program initialization parameters (PIP) in the SNA FMH-5 header. This error indicates the remote site is not another DB2 subsystem.

This abend reason code is issued by the following CSECT: None

**System Action:** The attempt to allocate an APPC conversation is rejected.

**User Response:** The failing SQL statement specified an SQL object that was either:

- An ALIAS for a remote object
- Or a three-part name identifying a remote object.

This access method can only be used when the remote object resides on another DB2 subsystem.

If the remote object resides on a different relation database system, you must use application-directed access to access the remote object.

**System Programmer Response:** If DB2 receives this sense code when attempting to start a conversation, the SYSIBM.LOCATIONS table probably has an incorrect LUNAME value for the failing site. If the wrong LUNAME is provided, VTAM routes the request to the wrong network destination.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 58, 59.

---

**10086034**

**Explanation:** An SNA FMH5 was received that requested an APPC conversation type (MAPPED or BASIC), which was not consistent with the transaction program name (TPN) specified.

**System Action:** The attempt to allocate an APPC conversation is rejected.

A DSNL032I message might have been written to the console. Refer to the description of this message for further information.

**User Response:** Notify the systems programmer.

**System Programmer Response:** The conversation type must be BASIC.

If DB2 sends this sense code to a remote site, an APPC application probably mistakenly routed an APPC ALLOCATE request to DB2.

If DB2 receives this sense code from a remote site, the DB2 SYSIBM.LOCATIONS table might have an incorrect LUNAME value for the failing LOCATION. This causes VTAM to route the request to the wrong destination, which can potentially be flagged in this manner.

If none of the above explains the failure, contact the support group for the remote site to determine why the conversation type is being sent incorrectly.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, "Problem determination" on page 1051 1, 58, 59, 83.
**10086041**

**Explanation:** An SNA FMH5 was received that requested a SYNC_LEVEL that was not consistent with the transaction program name (TPN) specified.

This abend reason code is issued by the following CSECT: DSNLVPF5

**System Action:** The attempt to allocate an APPC conversation is rejected.

A DSNL032I message might have been written to the console. Refer to the description of this message for further information.

**User Response:** Notify the systems programmer.

**System Programmer Response:** The SYNC_LEVEL must be NONE.

When DB2 sends this sense code, it is usually caused by an APPC application that mistakenly routed an APPC ALLOCATE request to DB2.

If DB2 receives this sense code, the DB2 SYSIBM.LOCATIONS table probably has an incorrect LUNAME value for the failing LOCATION. This causes VTAM to route the request to the wrong destination, which can potentially be flagged in this manner.

If none of the above explains the failure, you must contact the support group for the remote site to determine why the SYNC_LEVEL is being sent incorrectly.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 58, 59, 83.

---

**800A0000**

**Explanation:** A distributed database message was truncated during transmission through the network. When the data is being transmitted, the data is broken up into smaller pieces, based on the SNA RU size specified by your Communications Administrator. This error indicates that one or more device in your network could not accept messages of the size specified in the chosen RU size.

This abend reason code is issued by the following CSECT: None

**System Action:** The conversation is terminated.

**User Response:** Notify the systems programmer.

**System Programmer Response:** The data flowing to the failing destination specified an RU size that was too large for the network connections used to route the data. One of two actions must be taken:

1. The network connections along the path must be changed to support the largest PIU being transmitted (a PIU is 29 bytes longer than the RU size you specify).

   For VTAM channel-to-channel connections, the MAXBFRU parameter on the VTAM LINE statement is used to control this function. MAXBFRU specifies the number of 4KB buffers used to pass data over the channel. Since a PIU includes a 29 byte header, MAXBFRU must be at least 2 in order to support an RU size of 4096.

   For connections to NCP, the MAXDATA parameter on the PCCU macro must be large enough to hold an entire PIU.

2. If you would rather not change the MAXBFRU and MAXDATA values, a smaller RU size must be specified. This can be accomplished by reducing the RUSIZES parameter for each MODEENT macro used by DB2 in your LOGMODE table.

**Problem Determination:** Collect the following diagnostic items listed in Appendix B, “Problem determination” on page 1051: 1, 58.
Appendix A. CICS Transaction Abend/Dump Code

Explanation: The CICS attachment facility has detected an error. This is the 4-character code that identifies the ABEND/DUMP as a CICS attachment facility request for the CICS transaction associated with the error. This ABEND/DUMP is usually associated with one of the other CICS attachment facility X'04E' abends.

This code is issued by the following CSECTs: DSNCEXT1, DSNCSTOP

System Action: The CICS attachment facility processing proceeds as defined for the X'04E' system abend associated with the dump. If diagnostic information is required and the CICS attachment facility determines that the transaction should also be abended, EXEC CICS ABEND is issued using DSNC as the abend code. Otherwise dump continue, EXEC CICS DUMP, is issued with DSNC as the dump code, and a return code is placed in the application’s SQLCA.

User Response: Notify the system programmer.

Operator Response: Notify the system programmer.

System Programmer Response: The Problem Determination section of this message provides information in addition to the information that is related to the associated CICS attachment facility abend. Use it to assist you in determining the cause of the error.

Problem Determination: The reason for the error can be determined by the codes in the CLOTCFLG field of the CLOT control block, included in the dump. Explanations of codes in this field are as follows:

00 Normal, no error.
04 RCT entry has been corrupted or overlaid. See message DSNC044.
08 Attach Installation error.
0C Shutdown is in progress.
10 Abend because of 'no threads available'.
14 Serious error (system abend X'04E', reason code '00C30001').
18 The thread subtask has abended; see subtask dump.
1C Sign-on failed.
20 Resource is unavailable.
24 Create thread failed for a reason other than resource contention.
28 Unknown CICS call type.
2C Indoubt condition lost to CICS cold start.
30 Unit of recovery (UR) token for resolve indoubt is not in the indoubt list.
34 DB2 UR indoubt is inconsistent—CICS indicates that it should not be indoubt.
38 UR resolution is inconsistent—CICS indicates abort, but DB2 indicates commit.
3C DB2 resolve indoubt failed.
40 Deadlock; roll back the transaction.
44 Unknown CICS resource manager call.
48 TWA size too small for CICS attachment facility command processor program (DSNCCOM1). See message DSNC047.
4C Unable to interpret SQL call.
50 Shutdown during commit or abort
54 Abort is the only valid request.
58 Wrong language interface used with instrumentation facility interface application
5C Cannot link to dynamic plan exit.
60 Single phase commit failed.
64 Task was purged under CICS.

If the thread subtask has abended, a reason code has been put into the CLOTWK1 field and the abend code put into the CLOTWK2 field. The reason code can also be found in the CICS trace table, at TRACE ID X'C0', FIELD B.

Collect the subtask SNAP dump and refer to the reason code found in Section 4. DB2 Codes on page 577 The Problem Determination section of some reason codes refers to register contents at the time of the abend. The register contents can be found in the SNAP dump under RTM2WA SUMMARY. Register contents can also be found in the SYS1.LOGREC record.
Appendix B. Problem determination

Diagnostic items

1. Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time spanning the failure.
2. Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E/04F abends).
3. SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator initiated dump command or SLIP trap exit.
4. SYSABEND, SYSUDUMP, or SYMDUMP output.
5. Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
7. Link pack area map (LPAMAP) and nucleus load module map, obtained by executing AMBLIST.
8. Listing of the procs used to initialize DB2 address spaces.
9. Listing of DSNZPARM module used.
10. IDCAMS LISTCAT output for the ICF (VSAM) catalog containing the DB2 subsystem catalog that defined the failing index or table.
11. IDCAMS LISTCAT output showing the attributes of all of the active log data sets for the member of the DB2 member that failed.
12. VTOC listing of the DASD volume on which the failing operation occurred.
13. Dump of the index or table space that failed.
14. Listing of the results produced by the SQL statements.
15. Listing of DB2 catalog tables.
16. Contents of the BSDS (both copies if dual BSDS in use) obtained by using the DB2 print log map (DSNJU004) utility.
17. Source listing of the failing application program.
18. IRLM trace output.
19. Output of the GTF trace (if requested by IBM).
20. Listing of the DSNTRACE data set for the DSN (TSO attachment facility) session involved in the problem.
21. Listing of the ISPF log for the session involved in the problem.
22. CICS trace listing.
23. CICS attach MVS SNAP dump.
24. CICS transaction dump.
25. IMS trace output.
26. IMS dependent region and/or control region dump.
27. IMS/VS Version 1 system log information, for the period of time spanning the failure.
28. VVDS dump of the volumes containing the failure.
29. DB2 Repair dump of the requested page.
30. DSN1LOGP detail report containing log records associated with the damaged page.
31. Detailed description of events immediately prior to and during the abend.
32. SYSPRINT output, including JCL, for the application program or batch job and system messages that were issued. Make sure that MSGLEVEL=(1,1) on the JOB statement so that all diagnostic information is sent to SYSPRINT.
33. DB2 log output, including any DB2 Recovery Log Archive Tapes.
34. DB2 dump of the requested page.
35. Definitions of views and tables involved in the error.
36. Listing of the IRLM procedure.
37. Definitions of table spaces, tables, and indexes involved in the error.
38. Results from SELECT * from SYSIBM.SYSDATABASE.
39. Use IDCAMS to print from BSDS the record with key of 'X'16000001'.
40. DB2 Repair dump of the pages identified in DSN1014I messages.
41. CHECK utility output.
42. DB2 Repair dump of the pages identified in DSN1013I messages.
43. A copy via (DSN1COPY) of the index space or table space identified in the DSN1013I messages on tape.
44. DB2 Repair dump of the header page (page 0) for each index identified in the DSN1013I messages.
45. IMS console log.
46. UTPRINT output produced by utility invocation of SORT.
47. Repair dump of all SYSUTIL pages.
48. Dump of page set from DUMP option of REPAIR.
49. All dumps taken by the attachment facility or requesting application.
50. Console output from the system on which the job was run, and a listing of the MVS
SYSLOG data set for the period from the last IPL to the time of the failure.
52. Precompiler listing of failing application program with SOURCE(YES) and XREF(YES) specified.
53. Listing of SYSIBM.SYSLGRNX and/or SYSLGRNG, and SYSIBM.SYSCOPY.
54. A copy of the DDITV02 SYSin data set.
55. A copy of the DDOTV02 output data set.
56. The console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
57. The listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.
58. A listing of the contents of the SYSIBM.IPNAMES and SYSIBM.LUNAMES tables at the local DB2 system and the remote DB2 system.
59. A listing of the contents of the SYSIBM.USERNAMES table at the local DB2 system and the remote DB2 system.
60. Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E/04F abends). Availability of this dump is dependent upon the failing environment.
61. SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent upon the failing environment.
62. A copy (via DSN1COPY) on tape of the page set containing the DB2 Directory. Alternatively, request a dump (produced by the REPAIR Utility, DSN1COPY or DSN1PRNT) of the DBD for each database identified in the DSNI013I messages.
63. Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1 and ISDASDA0.
64. A copy of the table and index taken via DSN1COPY before any recover is performed.
65. Detailed description of events prior to the abend such as recovery or other activity affecting DSNDB06.SYSDBASE, DSNDB01.DSD01, or the subject table spaces.
66. Definitions of table spaces, tables, and indexes involved in the error. The record identifiers (OBIDs) identified with each table in the table space with the error can be obtained from SYSIBM.SYSTABLES.
67. Listing of the entire table space.
68. Listing of the DBD, obtained by executing UTILITY DIAGNOSE OBD.
69. Unformatted DSN1PRNT output of the DSNDB01.DBD01 page set. Use the method described in Section 6 of DB2 Diagnosis Guide and Reference to locate the inconsistent DBD in the DSNDB01.DBD01 page set.
70. The results of the following SQL:
   - SELECT * FROM SYSIBM.SYSINDEXES WHERE DBID=dbid ORDER BY OBID;
   - SELECT * FROM SYSIBM.SYSINDEXES WHERE DBID=dbid ORDER BY ISOBID;
   - SELECT * FROM SYSIBM.SYSTABLES WHERE DBID=dbid ORDER BY OBID;
   - SELECT * FROM SYSIBM.SYSTABLESPACE WHERE DBID=dbid ORDER BY OBID;
   - SELECT * FROM SYSIBM.SYSTABLESPACE WHERE DBID=dbid ORDER BY PSID.

Use the results to compare the information in the DB2 Catalog with the DBD. Determine which OBIDs are inconsistent with the DB2 Catalog. Use Section 6 of DB2 Diagnosis Guide and Reference to analyze the DBD.
71. DSN1LOGP output with DBID (1) OBID (1F) covering the period of time in which the DBD inconsistency may have occurred. This period of time is roughly from the time of the ABEND back to the time when the DB2 Catalog and DBD were believed to be consistent.
72. A copy of the log for this period so that additional DSN1LOGP reports can be produced for problem determination.
73. The location used in the alias entry in SYSIBM.SYSTABLES.
74. The contents of the SYSIBM.LOCATIONS table.
75. The AUTHORIZATION ID, PLANNNAME, and LUNAME of the thread used to select the MODENAME in the SYSIBM.MODESELECT table.
76. The contents of the SYSIBM.LOCATIONS table and the SYSIBM.MODESELECT table.
77. Listing of the contents of SYSIBM.LUMODES in the communications database.
78. System log printout (obtained via MVS WRITELOG operator command) showing related VSAM/media manager messages that may appear there (usually needed only if you
have a message or reason code that indicates a media manager services problem occurred.
79. A hexadecimal print of the first record of the failing DBRM.
80. The listing from the precompile job that generated the DBRM.
81. Output from the BIND attempt.
82. IMS or CICS trace and any dumps.
83. Statistics Class 4 trace record for the LUWID associated with the failing request.
84. All dumps created by this failure.
85. Job output

### Resource types

#### Table 3 (Page 1 of 2). Resource Types

<table>
<thead>
<tr>
<th>TYPE Code</th>
<th>Type of Resource</th>
<th>Name, Content, Format</th>
</tr>
</thead>
<tbody>
<tr>
<td>00000100</td>
<td>Database</td>
<td>DB</td>
</tr>
<tr>
<td>00000200</td>
<td>Table space</td>
<td>DB, SP</td>
</tr>
<tr>
<td>00000201</td>
<td>Index space</td>
<td>DB, SP</td>
</tr>
<tr>
<td>00000202</td>
<td>Table space</td>
<td>RD, DB, TS</td>
</tr>
<tr>
<td>00000205</td>
<td>Compression Dictionary</td>
<td>DB, SP</td>
</tr>
<tr>
<td>00000210</td>
<td>Partition</td>
<td>DB, SP, PT</td>
</tr>
<tr>
<td>00000220</td>
<td>Data set</td>
<td>DSN</td>
</tr>
<tr>
<td>00000230</td>
<td>Temporary file</td>
<td>SZ</td>
</tr>
<tr>
<td>00000240</td>
<td>Database procedure</td>
<td>DBP</td>
</tr>
<tr>
<td>00000300</td>
<td>Page</td>
<td>DB, SP, PG</td>
</tr>
<tr>
<td>00000301</td>
<td>Index minipage</td>
<td>DB, SP, PG, MP</td>
</tr>
<tr>
<td>00000302</td>
<td>Table space page</td>
<td>DB, SP, PG</td>
</tr>
<tr>
<td>00000303</td>
<td>Index space page</td>
<td>DB, SP, PG</td>
</tr>
<tr>
<td>00000304</td>
<td>Table space RID</td>
<td>DB, SP, RID</td>
</tr>
<tr>
<td>00000305</td>
<td>Index access/table space RID</td>
<td>DB, SP, RID</td>
</tr>
<tr>
<td>00000306</td>
<td>Index access/table space page</td>
<td>DB, SP, PG</td>
</tr>
<tr>
<td>00000307</td>
<td>Index space EOF</td>
<td>DB, SP, 01</td>
</tr>
<tr>
<td>00000400</td>
<td>ICF catalog</td>
<td>IC</td>
</tr>
<tr>
<td>00000500</td>
<td>Storage group</td>
<td>SG</td>
</tr>
<tr>
<td>00000600</td>
<td>EDM pool space</td>
<td>BP</td>
</tr>
<tr>
<td>00000601</td>
<td>EDM data space</td>
<td></td>
</tr>
<tr>
<td>00000700</td>
<td>Buffer pool space</td>
<td></td>
</tr>
<tr>
<td>00000701</td>
<td>Group buffer pool</td>
<td>GBP</td>
</tr>
<tr>
<td>00000800</td>
<td>Plan</td>
<td>PL</td>
</tr>
<tr>
<td>00000801</td>
<td>Package</td>
<td>COLLECTION, PACKAGE, CONTOKEN</td>
</tr>
<tr>
<td>00000802</td>
<td>BINDLOCK</td>
<td>BINDLOCK</td>
</tr>
<tr>
<td>00000900</td>
<td>32KB data area</td>
<td></td>
</tr>
<tr>
<td>00000901</td>
<td>Soft storage</td>
<td></td>
</tr>
<tr>
<td>00000903</td>
<td>Hash anchor</td>
<td>DB, SP, PG, AI</td>
</tr>
<tr>
<td>00000904</td>
<td>RIDLIST storage</td>
<td></td>
</tr>
<tr>
<td>00000905</td>
<td>IRLM storage</td>
<td></td>
</tr>
<tr>
<td>00000906</td>
<td>DB2</td>
<td>MEMBER</td>
</tr>
<tr>
<td>00000907</td>
<td>Data Space</td>
<td>MEMBER</td>
</tr>
<tr>
<td># 00000908</td>
<td>Basic Floating Point Extensions Facility</td>
<td></td>
</tr>
<tr>
<td>00000A00</td>
<td>Table</td>
<td>RD, CR, TB</td>
</tr>
<tr>
<td>00000A10</td>
<td>Alias</td>
<td>REL, DEP, OWNER, ALIAS</td>
</tr>
<tr>
<td>00000A11</td>
<td>Distinct type</td>
<td>SC, DT</td>
</tr>
<tr>
<td>00000A12</td>
<td>User-defined function</td>
<td>SC, SN</td>
</tr>
<tr>
<td>00000A13</td>
<td>Stored procedure</td>
<td>SC, SN</td>
</tr>
<tr>
<td>00000B00</td>
<td>View</td>
<td>RD, CR, VW</td>
</tr>
<tr>
<td>00000C00</td>
<td>Index</td>
<td>RD, CR, IX</td>
</tr>
<tr>
<td>00000C01</td>
<td>Index</td>
<td>CR, IX</td>
</tr>
<tr>
<td>00000D00</td>
<td>DBID/OBID</td>
<td>RD, DI, OI</td>
</tr>
<tr>
<td>00000D01</td>
<td>DBID/OBID</td>
<td>DI, OI</td>
</tr>
<tr>
<td>00000D02</td>
<td>OBID</td>
<td>OI</td>
</tr>
<tr>
<td>00000E00</td>
<td>SU limit exceeded</td>
<td>CN</td>
</tr>
<tr>
<td># 00000F00</td>
<td>Auxiliary column</td>
<td>DI, OI, ROWID, COLN</td>
</tr>
<tr>
<td>00000F01</td>
<td>LOB lock</td>
<td>DIX, PIX, ROWID, VRSN</td>
</tr>
<tr>
<td>00001000</td>
<td>DDF</td>
<td>LOCATION</td>
</tr>
<tr>
<td>00001001</td>
<td>System conversation</td>
<td>LU, MODE, RTNCD, FDBK2, RCPR, RCND, SENSE</td>
</tr>
</tbody>
</table>
Table 3 (Page 2 of 2). Resource Types

<table>
<thead>
<tr>
<th>TYPE Code</th>
<th>Type of Resource</th>
<th>Name, Content, Format</th>
</tr>
</thead>
<tbody>
<tr>
<td>00001002</td>
<td>Agent conversation</td>
<td>LU.MODE. RTNCD. FDBK2.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>RCPR1. RCSEC. SENSE</td>
</tr>
<tr>
<td>00001003</td>
<td>CNOS processing</td>
<td>LU.MODE. RTNCD. FDBK2.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>RCPR1. RCSEC. SENSE</td>
</tr>
<tr>
<td>00001004</td>
<td>CDB (Communication database)</td>
<td>LOCATION. AUTHORIZATION.ID. PL</td>
</tr>
<tr>
<td>00001005</td>
<td>DB access agent</td>
<td>LOCATION</td>
</tr>
<tr>
<td>00001007</td>
<td>TCP/IP domain name</td>
<td>LINKNAME. DOMAIN. ERRNO</td>
</tr>
<tr>
<td>00001008</td>
<td>TCP/IP service name</td>
<td>LOCATION. SERVICE. ERRNO</td>
</tr>
<tr>
<td>00001102</td>
<td>Bootstrap data set (BSDS)</td>
<td>MEMBER</td>
</tr>
<tr>
<td>00002000</td>
<td>Table space CS-claim class</td>
<td>DB.SP</td>
</tr>
<tr>
<td>00002001</td>
<td>Table space RR-claim class</td>
<td>DB.SP</td>
</tr>
<tr>
<td>00002002</td>
<td>Table space write-claim class</td>
<td>DB.SP</td>
</tr>
<tr>
<td>00002003</td>
<td>Index space CS-claim class</td>
<td>DB.SP</td>
</tr>
<tr>
<td>00002004</td>
<td>Index space RR-claim class</td>
<td>DB.SP</td>
</tr>
<tr>
<td>00002005</td>
<td>Index space write-claim class</td>
<td>DB.SP</td>
</tr>
<tr>
<td>00002006</td>
<td>Table space partition CS-claim class</td>
<td>DB.SP. PT</td>
</tr>
<tr>
<td>00002007</td>
<td>Table space partition RR-claim class</td>
<td>DB.SP. PT</td>
</tr>
<tr>
<td>00002008</td>
<td>Table space partition write-claim class</td>
<td>DB.SP. PT</td>
</tr>
<tr>
<td>00002009</td>
<td>Index space partition CS-claim class</td>
<td>DB.SP. PT</td>
</tr>
<tr>
<td>00002010</td>
<td>Index space partition RR-claim class</td>
<td>DB.SP. PT</td>
</tr>
<tr>
<td>00002011</td>
<td>Index space partition Write-claim class</td>
<td>DB.SP. PT</td>
</tr>
<tr>
<td>00002100</td>
<td>Table space DBET entry</td>
<td>DB.SP</td>
</tr>
<tr>
<td>00002101</td>
<td>Index space DBET entry</td>
<td>DB.SP</td>
</tr>
<tr>
<td>00002102</td>
<td>Table space partition DBET entry</td>
<td>DB.SP. PT</td>
</tr>
<tr>
<td>00002103</td>
<td>Index space partition DBET entry</td>
<td>DB.SP. PT</td>
</tr>
<tr>
<td>00002104</td>
<td>Logical partition DBET entry</td>
<td>DB.SP. PT</td>
</tr>
<tr>
<td>00002200</td>
<td>Routine Parameter Storage</td>
<td>DB.SP. PT</td>
</tr>
<tr>
<td># 00003000</td>
<td>Code (release maintenance_level or system parameter)</td>
<td>REL, APAR, ZPARM</td>
</tr>
<tr>
<td>A10X</td>
<td>Alias</td>
<td>RD.CR.AL</td>
</tr>
</tbody>
</table>
ABEND codes associated with DSN1COPY misuse

The following table represents the possible combinations of ABEND reason codes, CSECT-names, and ERQUAL’s that can result from the improper use of DSN1COPY. An improper use includes, but is not limited to:

- Specifying the wrong OBIDXLAT values
- Not restoring all the datasets of the table space or index space to the same level
- Restoring datasets to a level that does not match the definition in the catalog and directory
- Restoring one table space type to a different type (e.g. segmented to simple).

This table is not meant to be exhaustive, but contains the more common codes, or those that are likely to have been caused by DSN1COPY misuse. However, this does not eliminate the possibility that the occurrence of these ABEND codes can be caused by other errors, such as an inconsistent DBD, or a DB2 internal error. The numbers under 'Explanation' refer to the notes following the table.

<table>
<thead>
<tr>
<th>ABEND Reason Code</th>
<th>CSECT-name: ERQUAL</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>00C90101</td>
<td>DSNICKEY:5005</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>DSNICKEY:5006</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>DSNICSEL:5003</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>DSNICSEL:5008</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>DSNICUMW:5004</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>DSNICUMW:5005</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>DSNIDEFR:5005</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>DSNIDLOD:501B</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>DSNIIIMS:5006</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>DSNIIIMS:5008</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>DSNIIIMS:500A</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>DSNIIISF:5001</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>DSNILPG:5013</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>DSNIMOFR:500B</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>DSNIMOFR:500C</td>
<td>1</td>
</tr>
<tr>
<td>ABEND Reason Code</td>
<td>CSECT-name: ERQUAL</td>
<td>Explanation</td>
</tr>
<tr>
<td>-------------------</td>
<td>-------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>DSNIMRST:5001</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>DSNIMRST:5002</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>DSNIMRST:5003</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>DSNIMSMS:5004</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>DSNINXTP:5008</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>DSNIOSEL:5002</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>DSNIOSEL:5003</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>DSNIOSEL:53DD</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>DSNIOSEL:53DE</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>DSNIPOCR:5005</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>DSNIPOCR:5009</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>DSNIPOCR:500B</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>DSNIPOCR:500D</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>DSNIPOCR:500F</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>DSNIPRTM:5006</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>DSNIRECU:5002</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>DSNIREDR:5007</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>DSNIREDR:5008</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>DSNIREDR:5009</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>DSNIRELF:5011</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>DSNIRELK:5001</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>DSNIRLP:5002</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>DSNIRLP:500B</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>DSNIRLP:500C</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>DSNIRLP:5011</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>DSNIRNXT:53DD</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>DSNIRNXT:53DE</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>DSNISSEG:5002</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>DSNISSEG:5005</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>DSNISSEG:5006</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>DSNISSEG:5007</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>DSNISEGR:500A</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>DSNISEGR:500C</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>DSNISEL:5001</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>DSNISEL:5002</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>DSNISEL:5003</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>DSNISEL:5004</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>DSNISEL:5005</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>DSNISF:53DD</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>DSNISF:53DE</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>DSNISFX:5008</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>DSNISGN:5003</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>DSNISGN:5004</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>DSNISGS:5001</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>DSNIMR:5001</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>DSNISR:53DD</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>DSNISR:53DE</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>DSNISRTI:5004</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ABEND Reason Code</th>
<th>CSECT-name: ERQUAL</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>DSNJWLP:5003</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>DSNKCKIS:5003</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>DSNKFPRT:5003</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>DSNKLVLN:5006</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>DSNKLVLN:5007</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>DSNKMDLE:5005</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>DSNKMDLE:5007</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>DSNKNEXT:5001</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>DSNKNEXT:5004</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>DSNKPOCI:5004</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>DSNIBROK:0CA4</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>DSNIIID:5002</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>DSNKFPRT:5002</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>DSNKFPRT:5005</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>DSNKFPRT:5008</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>DSNKFNEX:5005</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>DSNKFNEX:5006</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>DSNKFNEX:5007</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>DSNKFNEX:5008</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>DSNILOD:5014</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>DSNILOD:5007</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>DSNISGC:5001</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>DSNISGC:5004</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>DSNKFNEX:5005</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>DSNKFNEX:5006</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>DSNKFNEX:5007</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>DSNKFPRT:5002</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>DSNKFPRT:5005</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>DSNKFPRT:5008</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>DSNKFPRT:5001</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>DSNKFPRT:5004</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>DSNKFPRT:5006</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>DSNKFPRT:5007</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>DSNKFPRT:5008</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>DSNKFPRT:5001</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>DSNKFPRT:5004</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>DSNKFPRT:5006</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>DSNKFPRT:5007</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>DSNKFPRT:5008</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>DSNKFPRT:5001</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>DSNKFPRT:5004</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>DSNKFPRT:5006</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>DSNKFPRT:5007</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>DSNKFPRT:5008</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>DSNKFPRT:5001</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>DSNKFPRT:5004</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>DSNKFPRT:5006</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>DSNKFPRT:5007</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>DSNKFPRT:5008</td>
<td>11</td>
<td></td>
</tr>
</tbody>
</table>
Explanations

The following explanations are groups of inconsistencies that relate to the ABEND codes, separated by user table spaces and user index spaces. Within each group are examples of specific inconsistencies representing each group.

User Table Spaces
1. Record or field length in the data does not match the length in the OBD
   • Either the fixed lengths do not match, or the variable length of the record is greater than the maximum allowed in the OBD
2. Record OBID in the data does not agree with the OBD
   • OBD corresponding to the OBID from the data cannot be found in the DBD, or the OBD in the DBD is of a different type.
3. Number of columns in the data row does not match the OBD definition
   • An ALTER ADD COLUMN was performed, but the copy of the data is downlevel with respect to the ALTER ADD DBD.
4. Index does not match the data
   • Either the index entry does not exist for the data record, or the index entry points to a missing or bad data record.
5. Data in one table space is inconsistent with related data in another table space
   • Referential integrity; parent and dependent are in different table spaces.
6. Table space definition in the OBD is inconsistent with the data
   • SEGSIZEs do not match
   • Table space type is different (simple restored into segmented)
   • Segment anchor in the OBD points to an invalid first segment (segment not allocated).
7. Table space is inconsistent within itself
   • Not all datasets are restored to the same level
   • Broken segment chains
   • Base and overflow records are not consistent.

User Index Spaces
1. Total key length in the index page or entry does not match the key length in the OBD
   • Index data restored with the wrong index or downlevel index.
2. Key length derived from data passed into the Index Manager does not match the length in the index page or entry
   • Data or index restored to inconsistent states.
3. Index OBID in the index does not agree with the OBD
   • OBD corresponding to the OBID from the index cannot be found in the DBD, or the OBD in the DBD is of a different type.
4. Index space definition in the OBD is inconsistent with the index data
   • Inconsistent subpage directory
   • Cannot find the key in the partition high-key directory
   • Keys not found.
5. Index space is inconsistent within itself
   • Not all datasets are restored to the same level
   • Index entry not connected to the root page.
6. Log RBA is unavailable for the associated table space or index space.
Appendix C. SQLSTATE Values—Common Error Codes

The information in this appendix is General-use Programming Interface and Associated Guidance Information, as defined in Appendix E, “Notices” on page 1081.

This appendix contains a summary of the SQLSTATE values that are produced by DB2 as an application server or requester. The SQLSTATE values are based on the SQLSTATE specifications contained in the standards: ISO/IEC 9075:1992, Database Language SQL and ANSI X3.135-1992 Database Language SQL.

Using SQLSTATE values

SQLSTATE values are returned to the application in the last five bytes of the SQLCA. Each five-character value is a return code that indicates the outcome of the most recently executed SQL statement.

SQLSTATE values are designed so that application programs can test for specific errors or classes of errors. The first character of an SQLSTATE value indicates whether the SQL statement was executed successfully or unsuccessfully (equal to or not equal to zero, respectively).

SQLSTATE values are comprised of a two-character class code value, followed by a three-character subclass code value. Class code values represent classes of successful and unsuccessful execution conditions. An application might define classes beginning with the characters ’7’ through ’9’ or ’I’ through ’Z’ and subclasses for any class beginning with the characters ’I’ through ’Z’.

Table 5 identifies the SQLSTATE class codes.

<table>
<thead>
<tr>
<th>Class Code</th>
<th>Meaning</th>
<th>For subcodes, refer to...</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>Unqualified Successful Completion</td>
<td>Table 6 on page 1061</td>
</tr>
<tr>
<td>01</td>
<td>Warning</td>
<td>Table 7 on page 1061</td>
</tr>
<tr>
<td>02</td>
<td>No Data</td>
<td>Table 8 on page 1062</td>
</tr>
<tr>
<td>07</td>
<td>Dynamic SQL Error</td>
<td>Table 9 on page 1062</td>
</tr>
<tr>
<td>08</td>
<td>Connection Exception</td>
<td>Table 10 on page 1063</td>
</tr>
<tr>
<td>09</td>
<td>Triggered Action Exception</td>
<td>Table 11 on page 1063</td>
</tr>
<tr>
<td>0A</td>
<td>Feature Not Supported</td>
<td>Table 12 on page 1063</td>
</tr>
<tr>
<td>0F</td>
<td>Invalid Token</td>
<td>Table 13 on page 1063</td>
</tr>
<tr>
<td>21</td>
<td>Cardinality Violation</td>
<td>Table 14 on page 1063</td>
</tr>
<tr>
<td>22</td>
<td>Data Exception</td>
<td>Table 15 on page 1063</td>
</tr>
<tr>
<td>23</td>
<td>Constraint Violation</td>
<td>Table 16 on page 1064</td>
</tr>
<tr>
<td>24</td>
<td>Invalid Cursor State</td>
<td>Table 17 on page 1064</td>
</tr>
<tr>
<td>25</td>
<td>Invalid Transaction State</td>
<td>Table 18 on page 1064</td>
</tr>
<tr>
<td>26</td>
<td>Invalid SQL Statement Identifier</td>
<td>Table 19 on page 1064</td>
</tr>
<tr>
<td>2D</td>
<td>Invalid Transaction Termination</td>
<td>Table 20 on page 1064</td>
</tr>
<tr>
<td>34</td>
<td>Invalid Cursor Name</td>
<td>Table 21 on page 1065</td>
</tr>
<tr>
<td>38</td>
<td>External Function Exception</td>
<td>Table 22 on page 1065</td>
</tr>
<tr>
<td>39</td>
<td>External Function Call Exception</td>
<td>Table 23 on page 1065</td>
</tr>
<tr>
<td>40</td>
<td>Transaction Rollback</td>
<td>Table 24 on page 1065</td>
</tr>
<tr>
<td>42</td>
<td>Syntax Error or Access Rule Violation</td>
<td>Table 25 on page 1065</td>
</tr>
<tr>
<td>44</td>
<td>WITH CHECK OPTION Violation</td>
<td>Table 26 on page 1069</td>
</tr>
</tbody>
</table>
Table 5 (Page 2 of 2). SQLSTATE Class Codes

<table>
<thead>
<tr>
<th>Class Code</th>
<th>Meaning</th>
<th>For subcodes, refer to...</th>
</tr>
</thead>
<tbody>
<tr>
<td>51</td>
<td>Invalid Application State</td>
<td>Table 27 on page 1069</td>
</tr>
<tr>
<td>53</td>
<td>Invalid Operand or Inconsistent Specification</td>
<td>Table 28 on page 1069</td>
</tr>
<tr>
<td>54</td>
<td>SQL or Product Limit Exceeded</td>
<td>Table 29 on page 1070</td>
</tr>
<tr>
<td>55</td>
<td>Object Not in Prerequisite State</td>
<td>Table 30 on page 1070</td>
</tr>
<tr>
<td>56</td>
<td>Miscellaneous SQL or Product Error</td>
<td>Table 31 on page 1070</td>
</tr>
<tr>
<td>57</td>
<td>Resource Not Available or Operator Intervention</td>
<td>Table 32 on page 1071</td>
</tr>
<tr>
<td>58</td>
<td>System Error</td>
<td>Table 33 on page 1072</td>
</tr>
</tbody>
</table>
**Table 6. Class Code 00: Unqualified Successful Completion**

<table>
<thead>
<tr>
<th>SQLSTATE Value</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>00000</td>
<td>Execution of the SQL statement was successful and did not result in any type of warning or exception condition.</td>
</tr>
</tbody>
</table>

**Table 7 (Page 1 of 2). Class Code 01: Warning**

<table>
<thead>
<tr>
<th>SQLSTATE Value</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>01520</td>
<td>The null value has been assigned to a host variable, because the characters cannot be converted.</td>
</tr>
<tr>
<td>01521</td>
<td>A specified server-name is undefined but is not needed until the statement is executed or the alias is used.</td>
</tr>
<tr>
<td>01522</td>
<td>The local table or view name used in the CREATE ALIAS statement is undefined.</td>
</tr>
<tr>
<td>01523</td>
<td>ALL was interpreted to exclude ALTER, INDEX, REFERENCES, and TRIGGER, because these privileges cannot be granted to a remote user.</td>
</tr>
<tr>
<td>01524</td>
<td>The result of a column function does not include the null values that were caused by evaluating the arithmetic expression implied by the column of the view.</td>
</tr>
<tr>
<td>01525</td>
<td>The number of INSERT values is not the same as the number of columns.</td>
</tr>
<tr>
<td>01527</td>
<td>Null values were eliminated from the argument of a column function.</td>
</tr>
<tr>
<td>01504</td>
<td>The value of a string was truncated when assigned to a host variable.</td>
</tr>
<tr>
<td>01505</td>
<td>Insufficient number of entries in an SQLDA.</td>
</tr>
<tr>
<td>01506</td>
<td>One or more ad hoc result sets were returned from the procedure.</td>
</tr>
<tr>
<td>01507</td>
<td>The procedure returned too many result sets.</td>
</tr>
<tr>
<td>01508</td>
<td>The number of result columns is larger than the number of host variables provided.</td>
</tr>
<tr>
<td>01509</td>
<td>The UPDATE or DELETE statement does not include a WHERE clause.</td>
</tr>
<tr>
<td>01510</td>
<td>The statement was not executed because it is unacceptable in this environment.</td>
</tr>
<tr>
<td>01511</td>
<td>An adjustment was made to a DATE or TIMESTAMP value to correct an invalid date resulting from an arithmetic operation.</td>
</tr>
<tr>
<td>01512</td>
<td>One or more non-zero digits were eliminated from the fractional part of a number used as the operand of a multiply or divide operation.</td>
</tr>
<tr>
<td>01513</td>
<td>The tablespace has been placed in the check-pending state.</td>
</tr>
<tr>
<td>01514</td>
<td>The number of INSERT values is not the same as the number of columns.</td>
</tr>
<tr>
<td>01515</td>
<td>One or more non-zero digits were eliminated from the fractional part of a number used as the operand of a multiply or divide operation.</td>
</tr>
<tr>
<td>01516</td>
<td>The definition of the table has been changed to incomplete.</td>
</tr>
<tr>
<td>01517</td>
<td>The null value has been assigned to a host variable, because a numeric value is out of range.</td>
</tr>
<tr>
<td>01518</td>
<td>An undefined object name was detected.</td>
</tr>
<tr>
<td>01519</td>
<td>An undefined column name was detected.</td>
</tr>
<tr>
<td>01520</td>
<td>Definition change may require a corresponding change on the read-only systems.</td>
</tr>
<tr>
<td>01521</td>
<td>An undefined object name was detected.</td>
</tr>
<tr>
<td>01522</td>
<td>An undefined column name was detected.</td>
</tr>
<tr>
<td>01523</td>
<td>An SQL statement cannot be EXPLAINed, because it references a remote object.</td>
</tr>
<tr>
<td>01524</td>
<td>The table cannot be subsequently defined as a dependent, because it has the maximum number of columns.</td>
</tr>
<tr>
<td>01525</td>
<td>Connection is successful but only SBCS characters should be used.</td>
</tr>
<tr>
<td>01526</td>
<td>A limit key has been truncated to 40 bytes.</td>
</tr>
<tr>
<td>01527</td>
<td>Authorization ID does not have the privilege to perform the operation as specified.</td>
</tr>
<tr>
<td>01528</td>
<td>A duplicate constraint has been ignored.</td>
</tr>
<tr>
<td>01529</td>
<td>An unqualified column name has been interpreted as a correlated reference.</td>
</tr>
<tr>
<td>01530</td>
<td>A column of the explanation table is improperly defined.</td>
</tr>
</tbody>
</table>
### Table 7. Class Code 01: Warning

<table>
<thead>
<tr>
<th>SQLSTATE Value</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>01548</td>
<td>The authorization ID does not have the privilege to perform the specified operation on the identified object.</td>
</tr>
<tr>
<td>01551</td>
<td>A table in a partitioned tablespace is not available, because its partitioned index has not been created.</td>
</tr>
<tr>
<td>01552</td>
<td>An ambiguous qualified column name was resolved to the first of the duplicate names in the FROM clause.</td>
</tr>
<tr>
<td>01553</td>
<td>Isolation level RR conflicts with a tablespace locksize of page.</td>
</tr>
<tr>
<td>01554</td>
<td>Decimal multiplication may cause overflow.</td>
</tr>
<tr>
<td>01558</td>
<td>A distribution protocol has been violated.</td>
</tr>
<tr>
<td>01560</td>
<td>A redundant GRANT has been ignored.</td>
</tr>
<tr>
<td>01561</td>
<td>An update to a data capture table was not signaled to the originating subsystem.</td>
</tr>
<tr>
<td>01566</td>
<td>The index has been placed in a recovering state.</td>
</tr>
<tr>
<td>01568</td>
<td>The dynamic SQL statement ends with a semicolon.</td>
</tr>
<tr>
<td>01569</td>
<td>The statement will be executed at a DB2 system that does not support character conversion.</td>
</tr>
<tr>
<td>01590</td>
<td>Type 2 indexes do not have subpages.</td>
</tr>
<tr>
<td>01591</td>
<td>The result of the positioned UPDATE or DELETE may depend on the order of the rows.</td>
</tr>
<tr>
<td>01594</td>
<td>Insufficient number of entries in an SQLDA for ALL information (i.e. not enough descriptors to return the distinct name).</td>
</tr>
<tr>
<td>01596</td>
<td>Comparison functions were not created for a distinct type based on a long string data type.</td>
</tr>
<tr>
<td>01597</td>
<td>Specific and non-specific volume IDs are not allowed in a storage group.</td>
</tr>
<tr>
<td>01602</td>
<td>The optimization level has been reduced.</td>
</tr>
<tr>
<td>01608</td>
<td>An unsupported value has been replaced.</td>
</tr>
<tr>
<td>01612</td>
<td>The part clause of a LOCK TABLE statement is not valid.</td>
</tr>
<tr>
<td>01614</td>
<td>There are fewer locators than the number of result sets.</td>
</tr>
<tr>
<td>01616</td>
<td>The estimated CPU cost exceeds the resource limit.</td>
</tr>
<tr>
<td>01624</td>
<td>The GBPCACHE specification is ignored because the bufferpool does not allow caching.</td>
</tr>
<tr>
<td>01625</td>
<td>The schema name appears more than once in the CURRENT PATH.</td>
</tr>
<tr>
<td>01628</td>
<td>The user-specified access path hints are invalid. The access path hints are ignored.</td>
</tr>
<tr>
<td>01629</td>
<td>User-specified access path hints were used during access path selection.</td>
</tr>
<tr>
<td>01635</td>
<td>Statements in the same program have duplicate QUERYNOs.</td>
</tr>
<tr>
<td>01638</td>
<td>SUBPAGES greater than one are not supported for Type 1 indexes in a data sharing environment.</td>
</tr>
<tr>
<td>01Hxx</td>
<td>Valid warning SQLSTATEs returned by a user-defined function or external procedure CALL.</td>
</tr>
</tbody>
</table>

### Table 8. Class Code 02: No Data

<table>
<thead>
<tr>
<th>SQLSTATE Value</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>02000</td>
<td>One of the following exceptions occurred:</td>
</tr>
<tr>
<td></td>
<td>• The result of the SELECT INTO statement or the subselect of the INSERT statement was an empty table.</td>
</tr>
<tr>
<td></td>
<td>• The number of rows identified in the searched UPDATE or DELETE statement was zero.</td>
</tr>
<tr>
<td></td>
<td>• The position of the cursor referenced in the FETCH statement was after the last row of the result table.</td>
</tr>
</tbody>
</table>

### Table 9. Class Code 07: Dynamic SQL Error

<table>
<thead>
<tr>
<th>SQLSTATE Value</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>07001</td>
<td>The number of host variables is not the same as the number of parameter markers.</td>
</tr>
<tr>
<td>07002</td>
<td>The call parameter list or control block is invalid.</td>
</tr>
<tr>
<td>07003</td>
<td>The statement identified in the EXECUTE statement is a select-statement, or is not in a prepared state.</td>
</tr>
<tr>
<td>07005</td>
<td>The statement name of the cursor identifies a prepared statement that cannot be associated with a cursor.</td>
</tr>
</tbody>
</table>
### Table 10. Class Code 08: Connection Exception

<table>
<thead>
<tr>
<th>SQLSTATE Value</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>08001</td>
<td>The application requester is unable to establish the connection.</td>
</tr>
<tr>
<td>08002</td>
<td>The connection already exists.</td>
</tr>
<tr>
<td>08003</td>
<td>The connection does not exist.</td>
</tr>
<tr>
<td>08004</td>
<td>The application server rejected establishment of the connection.</td>
</tr>
</tbody>
</table>

### Table 15 (Page 1 of 2). Class Code 22: Data Exception

<table>
<thead>
<tr>
<th>SQLSTATE Value</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>22001</td>
<td>Character data, right truncation occurred; for example, an update or insert value is a string that is too long for the column, or a datetime value cannot be assigned to a host variable, because it is too small.</td>
</tr>
<tr>
<td>22002</td>
<td>A null value, or the absence of an indicator parameter was detected; for example, the null value cannot be assigned to a host variable, because no indicator variable is specified.</td>
</tr>
<tr>
<td>22003</td>
<td>A numeric value is out of range.</td>
</tr>
<tr>
<td>22007</td>
<td>An invalid datetime format was detected; that is, an invalid string representation or value was specified.</td>
</tr>
<tr>
<td>22008</td>
<td>Datetime field overflow occurred; for example, an arithmetic operation on a date or timestamp has a result that is not within the valid range of dates.</td>
</tr>
<tr>
<td>22011</td>
<td>A substring error occurred; for example, an argument of SUBSTR is out of range.</td>
</tr>
<tr>
<td>22012</td>
<td>Division by zero is invalid.</td>
</tr>
<tr>
<td>22018</td>
<td>The character value for the CAST, DECIMAL, FLOAT, or INTEGER scalar function is invalid.</td>
</tr>
<tr>
<td>22019</td>
<td>The LIKE predicate has an invalid escape character.</td>
</tr>
<tr>
<td>22021</td>
<td>A character is not in the coded character set.</td>
</tr>
<tr>
<td>22023</td>
<td>A parameter or host variable value is invalid.</td>
</tr>
<tr>
<td>22024</td>
<td>A NUL-terminated input host variable or parameter did not contain a NUL.</td>
</tr>
<tr>
<td>22025</td>
<td>The LIKE predicate string pattern contains an invalid occurrence of an escape character.</td>
</tr>
<tr>
<td>22501</td>
<td>The length control field of a variable length string is negative or greater than the maximum.</td>
</tr>
<tr>
<td>22503</td>
<td>The string representation of a name is invalid.</td>
</tr>
<tr>
<td>22504</td>
<td>A mixed data value is invalid.</td>
</tr>
<tr>
<td>22505</td>
<td>The local date or time length has been increased, but the executing program relies on the old length.</td>
</tr>
<tr>
<td>22506</td>
<td>A reference to a datetime special register is invalid, because the TOD clock is malfunctioning or the operating system timezone parameter is out of range.</td>
</tr>
<tr>
<td>22508</td>
<td>CURRENT PACKAGESET is blank.</td>
</tr>
</tbody>
</table>

### Table 11. Class Code 09: Triggered Action Exception

<table>
<thead>
<tr>
<th>SQLSTATE Value</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>09000</td>
<td>A triggered SQL statement failed.</td>
</tr>
</tbody>
</table>

### Table 12. Class Code 0A: Feature Not Supported

<table>
<thead>
<tr>
<th>SQLSTATE Value</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>0A001</td>
<td>The CONNECT statement is invalid, because the process is not in the connectable state.</td>
</tr>
</tbody>
</table>

### Table 13. Class Code 0F: Invalid Token

<table>
<thead>
<tr>
<th>SQLSTATE Value</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>0F001</td>
<td>The locator value does not currently represent any value.</td>
</tr>
</tbody>
</table>

### Table 14. Class Code 21: Cardinality Violation

<table>
<thead>
<tr>
<th>SQLSTATE Value</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>21000</td>
<td>The result of a SELECT INTO is a result table of more than one row, or the result of the subquery of a basic predicate is more than one value.</td>
</tr>
<tr>
<td>21501</td>
<td>A multiple-row INSERT into a self-referencing table is invalid.</td>
</tr>
<tr>
<td>21502</td>
<td>A multiple-row UPDATE of a primary key is invalid.</td>
</tr>
</tbody>
</table>
### Table 15. Class Code 22: Data Exception

<table>
<thead>
<tr>
<th>SQLSTATE</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>22511</td>
<td>ADT length exceeds maximum column length. The value for a ROWID or reference column is not valid.</td>
</tr>
<tr>
<td>22512</td>
<td>A host variable in a predicate is invalid, because its indicator variable is negative.</td>
</tr>
<tr>
<td>22522</td>
<td>A CCSID value is not valid at all, not valid for the data type or subtype, or not valid for the encoding scheme.</td>
</tr>
<tr>
<td>22525</td>
<td>Partitioning key value is not valid.</td>
</tr>
</tbody>
</table>

### Table 16. Class Code 23: Constraint Violation

<table>
<thead>
<tr>
<th>SQLSTATE</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>23522</td>
<td>The range of an identity column has been exhausted.</td>
</tr>
</tbody>
</table>

### Table 17. Class Code 24: Invalid Cursor State

<table>
<thead>
<tr>
<th>SQLSTATE</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>22512</td>
<td>A host variable in a predicate is invalid, because its indicator variable is negative.</td>
</tr>
<tr>
<td>22522</td>
<td>A CCSID value is not valid at all, not valid for the data type or subtype, or not valid for the encoding scheme.</td>
</tr>
<tr>
<td>22525</td>
<td>Partitioning key value is not valid.</td>
</tr>
</tbody>
</table>

### Table 18. Class Code 25: Invalid Transaction State

<table>
<thead>
<tr>
<th>SQLSTATE</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>23502</td>
<td>An insert or update value is null, but the column cannot contain null values.</td>
</tr>
<tr>
<td>23503</td>
<td>The insert or update value of a foreign key is invalid.</td>
</tr>
<tr>
<td>23504</td>
<td>The update or delete of a parent key is prevented by a NO ACTION update or delete rule.</td>
</tr>
<tr>
<td>23505</td>
<td>A violation of the constraint imposed by a unique index or a unique constraint occurred.</td>
</tr>
<tr>
<td>23506</td>
<td>A violation of a constraint imposed by an edit or validation procedure occurred.</td>
</tr>
<tr>
<td>23507</td>
<td>A violation of a constraint imposed by a field procedure occurred.</td>
</tr>
<tr>
<td>23508</td>
<td>A violation of a constraint imposed by the DDL Registration Facility occurred.</td>
</tr>
<tr>
<td>23509</td>
<td>The owner of the package has constrained its use to environments which do not include that of the application process.</td>
</tr>
<tr>
<td>23510</td>
<td>A violation of a constraint on the use of the command imposed by the RLST table occurred.</td>
</tr>
<tr>
<td>23511</td>
<td>A parent row cannot be deleted, because the check constraint restricts the deletion.</td>
</tr>
<tr>
<td>23512</td>
<td>The check constraint cannot be added, because the table contains rows that do not satisfy the constraint definition.</td>
</tr>
<tr>
<td>23513</td>
<td>The resulting row of the INSERT or UPDATE does not conform to the check constraint definition.</td>
</tr>
<tr>
<td>23515</td>
<td>The unique index could not be created or unique constraint added, because the table contains duplicate values of the specified key.</td>
</tr>
</tbody>
</table>

### Table 19. Class Code 26: Invalid SQL Statement Identifier

<table>
<thead>
<tr>
<th>SQLSTATE</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>26501</td>
<td>The statement identified does not exist.</td>
</tr>
</tbody>
</table>

### Table 20. Class Code 2D: Invalid Transaction Termination

<table>
<thead>
<tr>
<th>SQLSTATE</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>2D521</td>
<td>SQL COMMIT or ROLLBACK are invalid in the current operating environment.</td>
</tr>
<tr>
<td>2D528</td>
<td>Dynamic COMMIT or COMMIT ON RETURN procedure is invalid for the application execution environment.</td>
</tr>
<tr>
<td>2D529</td>
<td>Dynamic ROLLBACK is invalid for the application execution environment.</td>
</tr>
</tbody>
</table>
## Table 21. Class Code 34: Invalid Cursor Name

<table>
<thead>
<tr>
<th>SQLSTATE Value</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>34000</td>
<td>Cursor name is invalid.</td>
</tr>
</tbody>
</table>

## Table 22. Class Code 38: External Function Exception

<table>
<thead>
<tr>
<th>SQLSTATE Value</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>38xxx</td>
<td>Valid error SQLSTATEs returned by a user-defined function, external procedure, or trigger.</td>
</tr>
<tr>
<td>38001</td>
<td>The external routine is not allowed to execute SQL statements.</td>
</tr>
<tr>
<td>38002</td>
<td>The external routine attempted to modify data, but the routine was not defined as MODIFIES SQL DATA.</td>
</tr>
<tr>
<td>38003</td>
<td>The statement is not allowed in a routine.</td>
</tr>
<tr>
<td>38004</td>
<td>The external routine attempted to read data, but the routine was not defined as READS SQL DATA.</td>
</tr>
<tr>
<td>38503</td>
<td>A user-defined function or procedure has abnormally terminated (abend).</td>
</tr>
<tr>
<td>38505</td>
<td>An SQL statement is not allowed in user-defined function on a FINAL CALL.</td>
</tr>
</tbody>
</table>

## Table 23. Class Code 39: External Function Call Exception

<table>
<thead>
<tr>
<th>SQLSTATE Value</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>39001</td>
<td>A user-defined function has returned an invalid SQLSTATE.</td>
</tr>
<tr>
<td>39004</td>
<td>A null value is not allowed for an IN or INOUT argument when using PARAMETER STYLE GENERAL.</td>
</tr>
<tr>
<td>39501</td>
<td>An output argument value returned from a function or a procedure was too long.</td>
</tr>
</tbody>
</table>

## Table 24. Class Code 40: Transaction Rollback

<table>
<thead>
<tr>
<th>SQLSTATE Value</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>40001</td>
<td>Deadlock or timeout with automatic rollback occurred.</td>
</tr>
</tbody>
</table>

## Table 25 (Page 1 of 5). Class Code 42: Syntax Error or Access Rule Violation

<table>
<thead>
<tr>
<th>SQLSTATE Value</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>42501</td>
<td>The authorization ID does not have the privilege to perform the specified operation on the identified object.</td>
</tr>
<tr>
<td>42502</td>
<td>The authorization ID does not have the privilege to perform the operation as specified.</td>
</tr>
<tr>
<td>42503</td>
<td>The authorization ID specified in SET CURRENT SQLID is not one of the authorization IDs of the application process.</td>
</tr>
<tr>
<td>42504</td>
<td>A specified privilege cannot be revoked from a specified authorization-name.</td>
</tr>
<tr>
<td>42505</td>
<td>Connection authorization failure occurred.</td>
</tr>
<tr>
<td>42506</td>
<td>Owner authorization failure occurred.</td>
</tr>
<tr>
<td>42509</td>
<td>SQL statement is not authorized, because of the DYNAMICRULES option.</td>
</tr>
<tr>
<td>42510</td>
<td>The authorization ID does not have the privilege to create functions or procedures in the WLM environment.</td>
</tr>
<tr>
<td>42601</td>
<td>A character, token, or clause is invalid or missing.</td>
</tr>
<tr>
<td>42602</td>
<td>A character that is invalid in a name has been detected.</td>
</tr>
<tr>
<td>42603</td>
<td>An unterminated string constant has been detected.</td>
</tr>
<tr>
<td>42604</td>
<td>An invalid numeric or string constant has been detected.</td>
</tr>
<tr>
<td>42605</td>
<td>The number of arguments specified for a scalar function is invalid.</td>
</tr>
<tr>
<td>42606</td>
<td>An invalid hexadecimal constant has been detected.</td>
</tr>
<tr>
<td>42607</td>
<td>An operand of a column function is invalid.</td>
</tr>
<tr>
<td>42609</td>
<td>All operands of an operator or predicate are parameter markers.</td>
</tr>
<tr>
<td>42610</td>
<td>A parameter marker is not allowed.</td>
</tr>
<tr>
<td>42611</td>
<td>The column or argument definition is invalid.</td>
</tr>
<tr>
<td>42612</td>
<td>The statement string is an SQL statement that is not acceptable in the context in which it is presented.</td>
</tr>
<tr>
<td>42613</td>
<td>Clauses are mutually exclusive.</td>
</tr>
<tr>
<td>42614</td>
<td>A duplicate keyword is invalid.</td>
</tr>
<tr>
<td>42615</td>
<td>An invalid alternative was detected.</td>
</tr>
<tr>
<td>42617</td>
<td>The statement string is blank or empty.</td>
</tr>
<tr>
<td>42618</td>
<td>A host variable is not allowed.</td>
</tr>
<tr>
<td>42621</td>
<td>The check constraint is invalid.</td>
</tr>
<tr>
<td>SQLSTATE</td>
<td>Meaning</td>
</tr>
<tr>
<td>----------</td>
<td>---------</td>
</tr>
<tr>
<td>42622</td>
<td>A name or label is too long.</td>
</tr>
<tr>
<td>42625</td>
<td>A CASE expression is invalid.</td>
</tr>
<tr>
<td>42626</td>
<td>A column specification is not allowed for a CREATE INDEX that is built on an auxiliary table.</td>
</tr>
<tr>
<td>42701</td>
<td>A duplicate column name in an INSERT or UPDATE statement was detected.</td>
</tr>
<tr>
<td>42702</td>
<td>A column reference is ambiguous, because of duplicate names.</td>
</tr>
<tr>
<td>42703</td>
<td>An undefined column or parameter name was detected.</td>
</tr>
<tr>
<td>42704</td>
<td>An undefined object or constraint name was detected.</td>
</tr>
<tr>
<td>42705</td>
<td>An undefined server-name was detected.</td>
</tr>
<tr>
<td>42707</td>
<td>A column name in ORDER BY does not identify a column of the result table.</td>
</tr>
<tr>
<td>42708</td>
<td>The locale specified in a SET LOCALE or locale sensitive function was not found.</td>
</tr>
<tr>
<td>42709</td>
<td>A duplicate column name in a PRIMARY, UNIQUE, or FOREIGN KEY clause was detected.</td>
</tr>
<tr>
<td>42710</td>
<td>A duplicate object or constraint name was detected.</td>
</tr>
<tr>
<td>42711</td>
<td>A duplicate column name was detected in the object definition or ALTER TABLE statement.</td>
</tr>
<tr>
<td>42712</td>
<td>A duplicate table designator was detected in the FROM clause or REFERENCES clause of a CREATE TRIGGER statement.</td>
</tr>
<tr>
<td>42714</td>
<td>A host variable can be defined only once.</td>
</tr>
<tr>
<td>42718</td>
<td>The local server name is not defined.</td>
</tr>
<tr>
<td>42721</td>
<td>The special register name is unknown at the server.</td>
</tr>
<tr>
<td>42723</td>
<td>A function with the same signature already exists in the schema.</td>
</tr>
<tr>
<td>42724</td>
<td>Unable to access an external program used for a user-defined function or a procedure.</td>
</tr>
<tr>
<td>42725</td>
<td>A function was referenced directly (not by either signature or by specific instance name), but there is more than one specific instance of that function.</td>
</tr>
<tr>
<td>42734</td>
<td>A duplicate parameter-name was detected.</td>
</tr>
<tr>
<td>42801</td>
<td>Isolation level UR is invalid, because the result table is not read-only.</td>
</tr>
</tbody>
</table>
## Appendix C. SQLSTATE Values—Common Error Codes

### Table 25 (Page 3 of 5). Class Code 42: Syntax Error or Access Rule Violation

<table>
<thead>
<tr>
<th>SQLSTATE Value</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>42824</td>
<td>An operand of LIKE is not a string, or the first operand is not a column.</td>
</tr>
<tr>
<td>42825</td>
<td>The rows of UNION, INTERSECT, EXCEPT, or VALUES do not have compatible columns.</td>
</tr>
<tr>
<td>42826</td>
<td>The rows of UNION, INTERSECT, EXCEPT, or VALUES do not have the same number of columns.</td>
</tr>
<tr>
<td>42827</td>
<td>The table identified in the UPDATE or DELETE is not the same table designated by the cursor.</td>
</tr>
<tr>
<td>42828</td>
<td>The table designated by the cursor of the UPDATE or DELETE statement cannot be modified, or the cursor is read-only.</td>
</tr>
<tr>
<td>42829</td>
<td>FOR UPDATE OF is invalid, because the result table designated by the cursor cannot be modified.</td>
</tr>
<tr>
<td>42830</td>
<td>The foreign key does not conform to the description of the parent key.</td>
</tr>
<tr>
<td>42831</td>
<td>A column of a primary or unique key cannot allow null values.</td>
</tr>
<tr>
<td>42832</td>
<td>The operation is not allowed on system objects.</td>
</tr>
<tr>
<td>42834</td>
<td>SET NULL cannot be specified, because the foreign key does not allow null values.</td>
</tr>
<tr>
<td>42837</td>
<td>The column cannot be altered, because its attributes are not compatible with the current column attributes.</td>
</tr>
<tr>
<td>42842</td>
<td>A column definition is invalid, because a specified option is inconsistent with the column description.</td>
</tr>
<tr>
<td>42846</td>
<td>Cast from source type to target type is not supported.</td>
</tr>
<tr>
<td>42849</td>
<td>The specified option is not supported for external functions.</td>
</tr>
<tr>
<td>42852</td>
<td>The privileges specified in GRANT or REVOKE are invalid or inconsistent. (For example, GRANT ALTER on a view.)</td>
</tr>
<tr>
<td>42855</td>
<td>The assignment of the LOB to this host variable is not allowed. The target host variable for all fetches of this LOB value for this cursor must be a locator or LOB variable.</td>
</tr>
<tr>
<td>42856</td>
<td>The alter of a CCSID to the specified CCSID is not valid.</td>
</tr>
<tr>
<td>42866</td>
<td>The data type in either the RETURNS clause or the CAST FROM clause in the CREATE FUNCTION statement is not appropriate for the data type returned from the sourced function or RETURN statement in the function body.</td>
</tr>
<tr>
<td>42877</td>
<td>The column name cannot be qualified.</td>
</tr>
<tr>
<td>42878</td>
<td>An invalid function or procedure name was used with the EXTERNAL keyword.</td>
</tr>
<tr>
<td>42879</td>
<td>The data type of one or more input parameters in the CREATE FUNCTION statement is not appropriate for the corresponding data type in the source function.</td>
</tr>
<tr>
<td>42880</td>
<td>The CAST TO and CAST FROM data types are incompatible, or would always result in truncation of a fixed string.</td>
</tr>
<tr>
<td>42882</td>
<td>The specific instance name qualifier is not equal to the function name qualifier.</td>
</tr>
<tr>
<td>42883</td>
<td>No function was found with a matching signature.</td>
</tr>
<tr>
<td>42884</td>
<td>No function or procedure was found with the specified name and compatible arguments.</td>
</tr>
<tr>
<td>42885</td>
<td>The number of input parameters specified on a CREATE FUNCTION statement does not match the number provided by the function named in the SOURCE clause.</td>
</tr>
<tr>
<td>42886</td>
<td>The IN, OUT, or INOUT parameter attributes do not match.</td>
</tr>
<tr>
<td>42887</td>
<td>The function is not valid in the context where it occurs.</td>
</tr>
<tr>
<td>42888</td>
<td>The table does not have a primary key.</td>
</tr>
<tr>
<td>42889</td>
<td>The table already has a primary key.</td>
</tr>
<tr>
<td>42890</td>
<td>A column list was specified in the references clause, but the identified parent table does not have a unique constraint with the specified column names.</td>
</tr>
<tr>
<td>42893</td>
<td>The object or constraint cannot be dropped or authoritites cannot be revoked from the object, because other objects are dependent on it.</td>
</tr>
<tr>
<td>42894</td>
<td>The DEFAULT value is invalid.</td>
</tr>
<tr>
<td>42895</td>
<td>For static SQL, an input host variable cannot be used, because its data type is not compatible with the parameter of a procedure or user-defined function.</td>
</tr>
<tr>
<td>SQLSTATE</td>
<td>Meaning</td>
</tr>
<tr>
<td>----------</td>
<td>---------</td>
</tr>
<tr>
<td>42898</td>
<td>An invalid correlated reference or transition table was detected in a trigger.</td>
</tr>
<tr>
<td>42899</td>
<td>Correlated references and column names are not allowed for triggered actions with the FOR EACH STATEMENT clause.</td>
</tr>
<tr>
<td>428B3</td>
<td>An invalid SQLSTATE was specified on RAISE_ERROR.</td>
</tr>
<tr>
<td>428B4</td>
<td>The part clause of a LOCK TABLE statement is not valid.</td>
</tr>
<tr>
<td>428C1</td>
<td>Only one ROWID column can be specified for a table.</td>
</tr>
<tr>
<td>428C7</td>
<td>A ROWID or reference column specification is not valid.</td>
</tr>
<tr>
<td>428C9</td>
<td>A ROWID column cannot be specified as the target column of an INSERT or UPDATE.</td>
</tr>
<tr>
<td>428D2</td>
<td>AS LOCATOR cannot be specified for a non-LOB parameter.</td>
</tr>
<tr>
<td>428D3</td>
<td>GENERATED was specified with a data type that is not a ROWID or a distinct type based on a ROWID.</td>
</tr>
<tr>
<td>42901</td>
<td>A column function does not include a column name.</td>
</tr>
<tr>
<td>42902</td>
<td>The object of the INSERT, UPDATE, or DELETE is also identified (possibly implicitly through a view) in a FROM clause.</td>
</tr>
<tr>
<td>42903</td>
<td>A WHERE, VALUES, GROUP BY, HAVING, or SET clause includes an invalid reference, such as a column or OLAP function.</td>
</tr>
<tr>
<td>42905</td>
<td>DISTINCT is specified more than once in a subselect.</td>
</tr>
<tr>
<td>42906</td>
<td>A column function in a subquery of a HAVING clause includes an expression that applies an operator to a correlated reference.</td>
</tr>
<tr>
<td>42907</td>
<td>The string is too long.</td>
</tr>
<tr>
<td>42908</td>
<td>The statement does not include a required column list.</td>
</tr>
<tr>
<td>42909</td>
<td>CREATE VIEW includes an operator or operand that is not valid for views. For example, UNION or UNION ALL.</td>
</tr>
<tr>
<td>42911</td>
<td>A decimal divide operation is invalid, because the result would have a negative scale.</td>
</tr>
<tr>
<td>42912</td>
<td>A column cannot be updated, because it is not identified in the UPDATE clause of the select-statement of the cursor.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SQLSTATE</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>42914</td>
<td>The DELETE is invalid, because a table referenced in a subquery can be affected by the operation.</td>
</tr>
<tr>
<td>42915</td>
<td>An invalid referential constraint has been detected.</td>
</tr>
<tr>
<td>42917</td>
<td>The object cannot be explicitly dropped.</td>
</tr>
<tr>
<td>42918</td>
<td>A user-defined data type cannot be created with a system-defined data type name (for example, INTEGER).</td>
</tr>
<tr>
<td>42920</td>
<td>A GROUP BY or HAVING clause is implicitly or explicitly specified in a SELECT INTO or a subquery of a basic predicate.</td>
</tr>
<tr>
<td>42924</td>
<td>An alias resolved to another alias rather than a table or view at the remote location.</td>
</tr>
<tr>
<td>42927</td>
<td>The function cannot be altered to NOT DETERMINISTIC or EXTERNAL ACTION because it is referenced by one or more existing views.</td>
</tr>
<tr>
<td>42932</td>
<td>The program preparation assumptions are incorrect.</td>
</tr>
<tr>
<td>42939</td>
<td>The object cannot be created, because the specified identifier is reserved for system use.</td>
</tr>
<tr>
<td>42945</td>
<td>ALTER CCSID is not allowed on a tablespace or database that contains a view.</td>
</tr>
<tr>
<td>42961</td>
<td>The server name specified does not match the current server.</td>
</tr>
<tr>
<td>42962</td>
<td>A long column, LOB column, structured type column or datalink column cannot be used in an index, a key, or a constraint.</td>
</tr>
<tr>
<td>42969</td>
<td>The package was not created and the current unit of work was rolled back, because of internal limitations or an invalid section number.</td>
</tr>
<tr>
<td>42972</td>
<td>An expression in a join-condition references columns in more than one of the operand tables.</td>
</tr>
<tr>
<td>42986</td>
<td>The source table in a RENAME TABLE statement is referenced in a view, trigger, or constraint.</td>
</tr>
<tr>
<td>42987</td>
<td>The statement is not allowed in a trigger.</td>
</tr>
<tr>
<td>42988</td>
<td>The operation is not allowed with mixed ASCII data.</td>
</tr>
<tr>
<td>42993</td>
<td>The column, as defined, is too large to be logged.</td>
</tr>
<tr>
<td>SQLSTATE Value</td>
<td>Meaning</td>
</tr>
<tr>
<td>----------------</td>
<td>---------</td>
</tr>
<tr>
<td>42995</td>
<td>The requested function does not apply to global temporary tables.</td>
</tr>
<tr>
<td>429B1</td>
<td>A stored procedure specifying COMMIT ON RETURN cannot be the target of a nested CALL statement.</td>
</tr>
</tbody>
</table>

**Table 26. Class Code 44: WITH CHECK OPTION Violation**

<table>
<thead>
<tr>
<th>SQLSTATE Value</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>44000</td>
<td>The INSERT or UPDATE is not allowed, because a resulting row does not satisfy the view definition.</td>
</tr>
</tbody>
</table>

**Table 27. Class Code 51: Invalid Application State**

<table>
<thead>
<tr>
<th>SQLSTATE Value</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>51002</td>
<td>The package corresponding to an SQL statement execution request was not found.</td>
</tr>
<tr>
<td>51003</td>
<td>Consistency tokens do not match.</td>
</tr>
<tr>
<td>51004</td>
<td>An address in the SQLDA is invalid.</td>
</tr>
<tr>
<td>51005</td>
<td>The previous system error has disabled this function.</td>
</tr>
<tr>
<td>51006</td>
<td>A valid connection has not been established.</td>
</tr>
<tr>
<td>51015</td>
<td>An attempt was made to execute a section that was found to be in error at bind time.</td>
</tr>
<tr>
<td>51021</td>
<td>SQL statements cannot be executed until the application process executes a rollback operation.</td>
</tr>
<tr>
<td>51030</td>
<td>The procedure referenced in a DESCRIBE PROCEDURE statement or an ALLOCATE CURSOR statement has not yet been called within the application process.</td>
</tr>
<tr>
<td>51032</td>
<td>A valid ASCII CCSID has not yet been specified for this DB2 UDB for OS/390 subsystem.</td>
</tr>
<tr>
<td>51033</td>
<td>The operation is not allowed because it operates on a result set that was not created by the current server.</td>
</tr>
<tr>
<td>51034</td>
<td>The function contains an insert, update, or delete which is not valid in the context in which it is invoked.</td>
</tr>
</tbody>
</table>

**Table 28. Class Code 53: Invalid Operand or Inconsistent Specification**

<table>
<thead>
<tr>
<th>SQLSTATE Value</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>53001</td>
<td>A clause is invalid, because the tablespace is a workfile.</td>
</tr>
<tr>
<td>53004</td>
<td>DSNDDB07 is the implicit workfile database.</td>
</tr>
<tr>
<td>53014</td>
<td>The specified OBID is invalid.</td>
</tr>
<tr>
<td>53035</td>
<td>Key limits must be specified in the CREATE INDEX statement.</td>
</tr>
<tr>
<td>53036</td>
<td>The number of PART specifications is not the same as the number of partitions.</td>
</tr>
<tr>
<td>53037</td>
<td>A partitioned index cannot be created on a table in a non-partitioned tablespace.</td>
</tr>
<tr>
<td>53038</td>
<td>The number of key limit values is zero or greater than the number of columns in the key.</td>
</tr>
<tr>
<td>53039</td>
<td>The PART clause of the ALTER statement is omitted or invalid.</td>
</tr>
<tr>
<td>53040</td>
<td>The bufferpool cannot be changed to BP32K.</td>
</tr>
<tr>
<td>53041</td>
<td>BP32K cannot be used for an index.</td>
</tr>
<tr>
<td>53043</td>
<td>Columns with different field procedures cannot be compared.</td>
</tr>
<tr>
<td>53044</td>
<td>The columns have a field procedure, but the field types are not compatible.</td>
</tr>
<tr>
<td>53045</td>
<td>The data type of the key limit constant is not the same as the data type of the column.</td>
</tr>
<tr>
<td>53046</td>
<td>The index space is not valid.</td>
</tr>
<tr>
<td>53088</td>
<td>LOCKMAX is inconsistent with the specified LOCKSIZE.</td>
</tr>
<tr>
<td>53089</td>
<td>The number of host variable parameters for a stored procedure is not equal to the number of expected host variable parameters.</td>
</tr>
<tr>
<td>53090</td>
<td>Both ASCII and EBCDIC data cannot be referenced in the same SQL statement.</td>
</tr>
<tr>
<td>53091</td>
<td>The encoding scheme specified is not the same as the encoding scheme currently in use for the containing tablespace.</td>
</tr>
<tr>
<td>53092</td>
<td>Type 1 index cannot be created for a table using the ASCII encoding scheme.</td>
</tr>
<tr>
<td>53093</td>
<td>The FOR ASCII clause is not supported for this database or tablespace.</td>
</tr>
<tr>
<td>53094</td>
<td>The PLAN_TABLE cannot be created with the FOR ASCII clause.</td>
</tr>
<tr>
<td>53095</td>
<td>A system tablespace cannot be created with an explicit ASCII or EBCDIC clause.</td>
</tr>
</tbody>
</table>
### Table 28. Class Code 53: Invalid Operand or Inconsistent Specification

<table>
<thead>
<tr>
<th>SQLSTATE Value</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>53096</td>
<td>The PART clause was specified on CREATE AUXILIARY TABLE, but the base table isn't partitioned.</td>
</tr>
<tr>
<td>53097</td>
<td>LOBs cannot be specified as parameters when the NO WLM ENVIRONMENT is specified.</td>
</tr>
<tr>
<td>53098</td>
<td>The auxiliary table cannot be created because a column was specified that is not a LOB column.</td>
</tr>
<tr>
<td>53099</td>
<td>A WLM ENVIRONMENT name must be specified on the CREATE FUNCTION statement.</td>
</tr>
</tbody>
</table>

### Table 30. Class Code 55: Object Not in Prerequisite State

<table>
<thead>
<tr>
<th>SQLSTATE Value</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>55002</td>
<td>The explanation table is not defined properly.</td>
</tr>
<tr>
<td>55003</td>
<td>The DDL registration table is not defined properly.</td>
</tr>
<tr>
<td>55004</td>
<td>The database cannot be accessed, because it is no longer a shared database.</td>
</tr>
<tr>
<td>55006</td>
<td>The object cannot be dropped, because it is currently in use by the same application process.</td>
</tr>
<tr>
<td>55011</td>
<td>The operation is disallowed, because the workfile database is not in the stopped state.</td>
</tr>
<tr>
<td>55012</td>
<td>A clustering index already exists on the table.</td>
</tr>
<tr>
<td>55014</td>
<td>The table does not have an index to enforce the uniqueness of the primary key.</td>
</tr>
<tr>
<td>55015</td>
<td>The ALTER statement cannot be executed, because the pageset is not in the stopped state.</td>
</tr>
<tr>
<td>55016</td>
<td>The ALTER statement is invalid, because the pageset has user-managed data sets.</td>
</tr>
<tr>
<td>55017</td>
<td>The table cannot be created in the tablespace, because it already contains a table.</td>
</tr>
<tr>
<td>55020</td>
<td>A work file database is already defined for the member.</td>
</tr>
<tr>
<td>55023</td>
<td>An error occurred calling a procedure.</td>
</tr>
<tr>
<td>55030</td>
<td>A package specified in a remote BIND REPLACE operation must not have a system list.</td>
</tr>
<tr>
<td>55035</td>
<td>The table cannot be dropped, because it is protected.</td>
</tr>
</tbody>
</table>

### Table 29. Class Code 54: SQL or Product Limit Exceeded

<table>
<thead>
<tr>
<th>SQLSTATE Value</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>54001</td>
<td>The statement is too long or too complex.</td>
</tr>
<tr>
<td>54002</td>
<td>A string constant is too long.</td>
</tr>
<tr>
<td>54004</td>
<td>The statement has too many table names or too many items in a SELECT or INSERT list.</td>
</tr>
<tr>
<td>54005</td>
<td>The sort key is too long, or has too many columns.</td>
</tr>
<tr>
<td>54006</td>
<td>The result of concatenation is too long.</td>
</tr>
<tr>
<td>54008</td>
<td>The key is too long, a column of the key is too long, or the key many columns.</td>
</tr>
<tr>
<td>54010</td>
<td>The record length of the table is too long.</td>
</tr>
<tr>
<td>54011</td>
<td>Too many columns were specified for a table or view.</td>
</tr>
<tr>
<td>54012</td>
<td>The FIELDPROC literal list is too long.</td>
</tr>
<tr>
<td>54021</td>
<td>Too many constraints, or the size of the constraint is too large.</td>
</tr>
<tr>
<td>54024</td>
<td>The check constraint is too long.</td>
</tr>
<tr>
<td>54025</td>
<td>The table description exceeds the maximum size of the object descriptor.</td>
</tr>
<tr>
<td>54027</td>
<td>The catalog has the maximum number of user-defined indexes.</td>
</tr>
<tr>
<td>54035</td>
<td>An internal object limit exceeded.</td>
</tr>
<tr>
<td>54038</td>
<td>Maximum depth of cascaded triggers exceeded.</td>
</tr>
<tr>
<td>54041</td>
<td>Only 32767 OBIDs are allowed.</td>
</tr>
<tr>
<td>54042</td>
<td>Only one index is allowed on an auxiliary table.</td>
</tr>
</tbody>
</table>

### Table 31. Class Code 56: Miscellaneous SQL or Product Error

<table>
<thead>
<tr>
<th>SQLSTATE Value</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>56010</td>
<td>The subtype of a string variable is not the same as the subtype at bind time, and the difference cannot be resolved by character conversion.</td>
</tr>
<tr>
<td>56016</td>
<td>The partitioning keys are not specified in ascending or descending order.</td>
</tr>
<tr>
<td>56018</td>
<td>A column cannot be added to the table, because it has an edit procedure.</td>
</tr>
<tr>
<td>56023</td>
<td>An invalid reference to a remote object has been detected.</td>
</tr>
</tbody>
</table>
Table 31 (Page 2 of 2). Class Code 56: Miscellaneous SQL or Product Error

<table>
<thead>
<tr>
<th>SQLSTATE Value</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>56025</td>
<td>An invalid use of AT ALL LOCATIONS in GRANT or REVOKE has been detected.</td>
</tr>
<tr>
<td>56027</td>
<td>A nullable column of a foreign key with a delete rule of SET NULL cannot be part of the key of a partitioned index.</td>
</tr>
<tr>
<td>56031</td>
<td>The clause or scalar function is invalid, because mixed and DBCS data are not supported on this system.</td>
</tr>
<tr>
<td>56036</td>
<td>Specific and non-specific volume IDs are not allowed in a storage group.</td>
</tr>
<tr>
<td>56038</td>
<td>The requested feature is not supported in this environment.</td>
</tr>
<tr>
<td>56040</td>
<td>CURRENT SQLID cannot be used in a statement that references remote objects.</td>
</tr>
<tr>
<td>56045</td>
<td>The application must issue a rollback operation to back out the change that was made at the read-only application server.</td>
</tr>
<tr>
<td>56052</td>
<td>The remote requester tried to bind, rebind, or free a trigger package.</td>
</tr>
<tr>
<td>56053</td>
<td>The parent of a table in a read-only shared database must also be a table in a read-only shared database.</td>
</tr>
<tr>
<td>56054</td>
<td>User-defined datasets for objects in a shared database must be defined with SHAREOPTIONS(1,3).</td>
</tr>
<tr>
<td>56055</td>
<td>The database is defined as SHARE READ, but the tablespace or indexspace has not been defined on the owning system.</td>
</tr>
<tr>
<td>56056</td>
<td>The description of an object in a SHARE READ database must be consistent with its description in the OWNER system.</td>
</tr>
<tr>
<td>56057</td>
<td>A database cannot be altered from SHARE READ to SHARE OWNER.</td>
</tr>
<tr>
<td>56059</td>
<td>An error occurred when binding a triggered SQL statement.</td>
</tr>
<tr>
<td>56060</td>
<td>An LE function failed.</td>
</tr>
<tr>
<td>56062</td>
<td>A distributed operation is invalid, because the unit of work was started before DDF.</td>
</tr>
<tr>
<td>56064</td>
<td>The bind operation is disallowed, because the program depends on functions of a release from which fallback has occurred.</td>
</tr>
<tr>
<td>56065</td>
<td>The bind operation is disallowed, because the DBRM has been modified or was created for a different release.</td>
</tr>
</tbody>
</table>

Table 32 (Page 1 of 2). Class Code 57: Resource Not Available or Operator Intervention

<table>
<thead>
<tr>
<th>SQLSTATE Value</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>57001</td>
<td>The table is unavailable, because it does not have a primary index.</td>
</tr>
<tr>
<td>57002</td>
<td>GRANT and REVOKE are invalid, because authorization has been disabled.</td>
</tr>
<tr>
<td>57003</td>
<td>The specified bufferpool has not been activated.</td>
</tr>
</tbody>
</table>
Table 32 (Page 2 of 2). Class Code 57: Resource Not Available or Operator Intervention

<table>
<thead>
<tr>
<th>SQLSTATE Value</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>57004</td>
<td>The table is unavailable, because it lacks a partitioned index.</td>
</tr>
<tr>
<td>57005</td>
<td>The statement cannot be executed, because a utility or a governor time limit was exceeded.</td>
</tr>
<tr>
<td>57006</td>
<td>The object cannot be created, because a DROP or CREATE is pending.</td>
</tr>
<tr>
<td>57007</td>
<td>The object cannot be used, because a DROP or ALTER is pending.</td>
</tr>
<tr>
<td>57008</td>
<td>The date or time local format exit has not been installed.</td>
</tr>
<tr>
<td>57010</td>
<td>A field procedure could not be loaded.</td>
</tr>
<tr>
<td>57011</td>
<td>Virtual storage or database resource is not available.</td>
</tr>
<tr>
<td>57012</td>
<td>A non-database resource is not available. This will not affect the successful execution of subsequent statements.</td>
</tr>
<tr>
<td>57013</td>
<td>A non-database resource is not available. This will affect the successful execution of subsequent statements.</td>
</tr>
<tr>
<td>57014</td>
<td>Processing was canceled as requested.</td>
</tr>
<tr>
<td>57015</td>
<td>Connection to the local DB2 not established.</td>
</tr>
<tr>
<td>57017</td>
<td>Character conversion is not defined.</td>
</tr>
<tr>
<td>57018</td>
<td>A DDL registration table or its unique index does not exist.</td>
</tr>
<tr>
<td>57023</td>
<td>The DDL statement cannot be executed, because a DROP is pending of a DDL registration table.</td>
</tr>
<tr>
<td>57033</td>
<td>Deadlock or timeout occurred without automatic rollback.</td>
</tr>
<tr>
<td>57051</td>
<td>The estimated CPU cost exceeds the resource limit.</td>
</tr>
<tr>
<td>57054</td>
<td>A table is not available until the auxiliary tables and indexes for its externally stored columns have been created.</td>
</tr>
<tr>
<td>57057</td>
<td>The SQL statement cannot be executed due to a prior condition in a DRDA chain of SQL statements.</td>
</tr>
</tbody>
</table>

Table 33. Class Code 58: System Error

<table>
<thead>
<tr>
<th>SQLSTATE Value</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>58002</td>
<td>An exit has returned an error or invalid data.</td>
</tr>
<tr>
<td>58003</td>
<td>An invalid section number was detected.</td>
</tr>
<tr>
<td>58004</td>
<td>A system error (that does not necessarily preclude the successful execution of subsequent SQL statements) occurred.</td>
</tr>
<tr>
<td>58005</td>
<td>A system error (that prevents the successful execution of subsequent SQL statements) occurred.</td>
</tr>
<tr>
<td>58006</td>
<td>A system error occurred during connection.</td>
</tr>
<tr>
<td>58008</td>
<td>Execution failed due to a distribution protocol error that will not affect the successful execution of subsequent DDM commands or SQL statements.</td>
</tr>
<tr>
<td>58009</td>
<td>Execution failed due to a distribution protocol error that caused deallocation of the conversation.</td>
</tr>
<tr>
<td>58010</td>
<td>Execution failed due to a distribution protocol error that will affect the successful execution of subsequent DDM commands or SQL statements.</td>
</tr>
<tr>
<td>58011</td>
<td>The DDM command is invalid while the bind process in progress.</td>
</tr>
<tr>
<td>58012</td>
<td>The bind process with the specified package name and consistency token is not active.</td>
</tr>
<tr>
<td>58013</td>
<td>The SQLCODE is inconsistent with the reply message.</td>
</tr>
<tr>
<td>58014</td>
<td>The DDM command is not supported.</td>
</tr>
<tr>
<td>58015</td>
<td>The DDM object is not supported.</td>
</tr>
<tr>
<td>58016</td>
<td>The DDM parameter is not supported.</td>
</tr>
<tr>
<td>58017</td>
<td>The DDM parameter value is not supported.</td>
</tr>
<tr>
<td>58018</td>
<td>The DDM reply message is not supported.</td>
</tr>
<tr>
<td>58026</td>
<td>The number of host variables in the statement is not equal to the number of host variables in SQLSTTVRB.</td>
</tr>
</tbody>
</table>
Appendix D. New, Changed, and Deleted Messages and Codes

This appendix lists new, changed, and deleted messages and codes to support DB2 Version 6, as follows:

- “New messages and codes” on page 1074 lists new SQL return codes, messages, and reason codes.
- “Changed messages and codes” on page 1077 lists changed SQL return codes, messages, reason codes, and SNA codes.
- “Changed SQLSTATEs” on page 1079 lists changed SQLSTATE values.
- “Deleted messages and codes” on page 1079 lists deleted SQL return codes and messages.
<table>
<thead>
<tr>
<th>New messages and codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>+236 -455 -20004 # 00D30110</td>
</tr>
<tr>
<td>+237 -456 -20005 00D3102B</td>
</tr>
<tr>
<td>+238 -457 -20008 00D31052</td>
</tr>
<tr>
<td>+239 -458 -20070 # 00D31059</td>
</tr>
<tr>
<td>+352 -461 -20071 # 00D3111F</td>
</tr>
<tr>
<td>+392 -463 -20072 00D3570A</td>
</tr>
<tr>
<td>+394 -473 -20073 00D3570B</td>
</tr>
<tr>
<td>+395 -475 -20074 # 00D35D19</td>
</tr>
<tr>
<td>+396 -476 # -20091 # 00D35D1A</td>
</tr>
<tr>
<td>+434 -478 # -20092 00D35D1B</td>
</tr>
<tr>
<td>+462 -483 -20100 00D35D1C</td>
</tr>
<tr>
<td>+495 -487 -20101 00D35E00</td>
</tr>
<tr>
<td>+585 -491 -20102 00D35E4A</td>
</tr>
<tr>
<td>+599 -492 -20104 00D35E4B</td>
</tr>
<tr>
<td>+799 -495 -20106 00D35E51</td>
</tr>
<tr>
<td># +883 -577 # -20107 00D35E52</td>
</tr>
<tr>
<td>+20002 -579 # -20110 00D35E53</td>
</tr>
<tr>
<td>+20007 -583 # -20111 00D35E54</td>
</tr>
<tr>
<td># +20122 -585 -30002 00D35E55</td>
</tr>
<tr>
<td># -079 -586 00C12018 00D35E6</td>
</tr>
<tr>
<td>-097 -587 00C12019 # 00D35E7</td>
</tr>
<tr>
<td>-123 -590 00C12020 00D35E8</td>
</tr>
<tr>
<td>-137 -592 # 00C12021 00D35E9</td>
</tr>
<tr>
<td>-147 # -593 00C12205 # 00D35E5A</td>
</tr>
<tr>
<td>-151 # -594 00C200EE # 00D35E5B</td>
</tr>
<tr>
<td># -154 -658 # 00C200EF # 00D35E5C</td>
</tr>
<tr>
<td>-190 -696 # 00C20110 00D6001</td>
</tr>
<tr>
<td>-212 -697 00C20224 00D60100</td>
</tr>
<tr>
<td>-214 -723 00C20230 00D60801</td>
</tr>
<tr>
<td>-229 -724 00C20231 00D60802</td>
</tr>
<tr>
<td>-350 -725 00C20232 00D60803</td>
</tr>
<tr>
<td>-352 -729 00C20233 00D60C02</td>
</tr>
<tr>
<td># -359 -739 00C20267 00D60C03</td>
</tr>
<tr>
<td># -373 -740 00C20268 # 00D70008</td>
</tr>
<tr>
<td>-390 -746 00C30200 # 00D70043</td>
</tr>
<tr>
<td>-392 -747 00C8901X # 00E7900E</td>
</tr>
<tr>
<td>-394 -751 # 00C90060 # 00D92013</td>
</tr>
<tr>
<td>-395 -769 # 00C90063 # 00D92023</td>
</tr>
<tr>
<td>-396 -796 # 00C90064 # 00D92024</td>
</tr>
<tr>
<td>-397 -797 # 00C90090 # 00D93002</td>
</tr>
<tr>
<td>-398 -798 00C900AD # 00D93013</td>
</tr>
<tr>
<td>-399 # -846 00C900AE # 00D94002</td>
</tr>
<tr>
<td>-433 # -867 00C900C5 # 00D99900</td>
</tr>
<tr>
<td>-435 # -880 00C900C6 # 00D94014</td>
</tr>
<tr>
<td>-438 # -881 # 00C900C7 00E2002C</td>
</tr>
<tr>
<td>-441 # -882 00C900C8 00E2002D</td>
</tr>
<tr>
<td>-443 # -904 # 00C900C9 00E2002E</td>
</tr>
<tr>
<td>-449 -909 00C900D0 00E2002F</td>
</tr>
<tr>
<td>-451 # -922 00C900D1 00E30006</td>
</tr>
<tr>
<td>-453 # -1760 00C900D2 00E4001B</td>
</tr>
<tr>
<td>-454 -20003 00C900D3 00E400C2</td>
</tr>
<tr>
<td>Code</td>
</tr>
<tr>
<td>--------</td>
</tr>
<tr>
<td>00E40125</td>
</tr>
<tr>
<td>00E40126</td>
</tr>
<tr>
<td>00E40170</td>
</tr>
<tr>
<td>00E40218</td>
</tr>
<tr>
<td>00E4033F</td>
</tr>
<tr>
<td>00E40347</td>
</tr>
<tr>
<td>00E40350</td>
</tr>
<tr>
<td>00E40351</td>
</tr>
<tr>
<td>00E40353</td>
</tr>
<tr>
<td>00E4070D</td>
</tr>
<tr>
<td>00E4D5D2</td>
</tr>
<tr>
<td>00E50098</td>
</tr>
<tr>
<td>00E6080A</td>
</tr>
<tr>
<td>00E6080B</td>
</tr>
<tr>
<td>00E6080C</td>
</tr>
<tr>
<td>00E6083A</td>
</tr>
<tr>
<td>0#E60815</td>
</tr>
<tr>
<td>0#E60816</td>
</tr>
<tr>
<td>00E60874</td>
</tr>
<tr>
<td>00E60875</td>
</tr>
<tr>
<td>00E60889</td>
</tr>
<tr>
<td>00E70014</td>
</tr>
<tr>
<td>0#E7009B</td>
</tr>
<tr>
<td>#</td>
</tr>
<tr>
<td>00E700A6</td>
</tr>
<tr>
<td>00E700A7</td>
</tr>
<tr>
<td>00E70106</td>
</tr>
<tr>
<td>00E73001</td>
</tr>
<tr>
<td>00E73002</td>
</tr>
<tr>
<td>00E73003</td>
</tr>
<tr>
<td>00E73004</td>
</tr>
<tr>
<td>0#E73005</td>
</tr>
<tr>
<td>00E7900C</td>
</tr>
<tr>
<td>00E7900F</td>
</tr>
<tr>
<td>0#E79103</td>
</tr>
<tr>
<td>0#E79106</td>
</tr>
<tr>
<td>0#E79200</td>
</tr>
<tr>
<td>00F30097</td>
</tr>
<tr>
<td>00F30098</td>
</tr>
<tr>
<td>00F30099</td>
</tr>
<tr>
<td>00F3009A</td>
</tr>
<tr>
<td>00F3009B</td>
</tr>
<tr>
<td>00F3009C</td>
</tr>
<tr>
<td>00F3009D</td>
</tr>
<tr>
<td>00F3009E</td>
</tr>
<tr>
<td>00F3009F</td>
</tr>
<tr>
<td>0#F30106</td>
</tr>
<tr>
<td>0#F30107</td>
</tr>
<tr>
<td>DSNB229I</td>
</tr>
<tr>
<td>DSNB315I</td>
</tr>
<tr>
<td>DSNB406I</td>
</tr>
<tr>
<td>DSNB461I</td>
</tr>
<tr>
<td>DSNB462I</td>
</tr>
<tr>
<td>DSNB463I</td>
</tr>
</tbody>
</table>

Appendix D. New, Changed, and Deleted Messages and Codes

1075
<table>
<thead>
<tr>
<th>Code</th>
<th>Code</th>
<th>Code</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>DSNU942I</td>
<td>DSNV479I</td>
<td>DSX986I</td>
<td>DXR168I</td>
</tr>
<tr>
<td>DSNU944I</td>
<td>DSX206I</td>
<td>DSX987I</td>
<td>DXR169I</td>
</tr>
<tr>
<td>DSNU945I</td>
<td>DSX207I</td>
<td>DSX988I</td>
<td>DXR170I</td>
</tr>
<tr>
<td>DSNV431I</td>
<td>DSX955I</td>
<td>DSX989I</td>
<td>DXR171I</td>
</tr>
<tr>
<td>DSNV432I</td>
<td>DSX956I</td>
<td>DSX990E</td>
<td>DXR172I</td>
</tr>
<tr>
<td>DSNV433I</td>
<td>DSX957I</td>
<td>DSX991I</td>
<td>DXR173I</td>
</tr>
<tr>
<td>DSNV434I</td>
<td>DSX961I</td>
<td>DSX992E</td>
<td>DXR174I</td>
</tr>
<tr>
<td>DSNV435I</td>
<td>DSX969I</td>
<td>DSX993I</td>
<td>DXR175E</td>
</tr>
<tr>
<td>DSNV436I</td>
<td>DSX970I</td>
<td>DSN1945I</td>
<td>DXR176I</td>
</tr>
<tr>
<td>DSNV437I</td>
<td>DSX971I</td>
<td>DSN1954I</td>
<td>DXR177I</td>
</tr>
<tr>
<td>DSNV471I</td>
<td>DSX972I</td>
<td>DXR159I</td>
<td>DXR178I</td>
</tr>
<tr>
<td></td>
<td>DSX974I</td>
<td>DXR160I</td>
<td>DXR179I</td>
</tr>
<tr>
<td></td>
<td>DSX975I</td>
<td>DXR161I</td>
<td>DXR180I</td>
</tr>
<tr>
<td></td>
<td>DSX977I</td>
<td>DXR162I</td>
<td>DXR181I</td>
</tr>
<tr>
<td></td>
<td>DSX984I</td>
<td>DXR163I</td>
<td>DXR182I</td>
</tr>
<tr>
<td></td>
<td>DSX985I</td>
<td>DXR167E</td>
<td></td>
</tr>
</tbody>
</table>
### Changed messages and codes

These messages and codes were updated:

This list does not include messages or codes with the following types of changes:

- Book references
- Editorial

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>+107</td>
<td>+109</td>
<td>+445</td>
<td>+466</td>
</tr>
<tr>
<td>407</td>
<td>401</td>
<td>404</td>
<td>407</td>
</tr>
<tr>
<td></td>
<td></td>
<td>663</td>
<td>665</td>
</tr>
<tr>
<td></td>
<td></td>
<td>636</td>
<td>660</td>
</tr>
</tbody>
</table>

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>+610</td>
<td>+664</td>
<td>+802</td>
<td>+2000</td>
</tr>
<tr>
<td>418</td>
<td>423</td>
<td>430</td>
<td>433</td>
</tr>
<tr>
<td>676</td>
<td>678</td>
<td>680</td>
<td>713</td>
</tr>
<tr>
<td>670</td>
<td></td>
<td></td>
<td>739</td>
</tr>
</tbody>
</table>

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>-104</td>
<td>-107</td>
<td>-111</td>
<td>-114</td>
</tr>
<tr>
<td>450</td>
<td>457</td>
<td>469</td>
<td>470</td>
</tr>
<tr>
<td>750</td>
<td>751</td>
<td>751</td>
<td>766</td>
</tr>
<tr>
<td>741</td>
<td></td>
<td></td>
<td>811</td>
</tr>
</tbody>
</table>

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>-120</td>
<td>-121</td>
<td>-132</td>
<td>-142</td>
</tr>
<tr>
<td>480</td>
<td>487</td>
<td>497</td>
<td>501</td>
</tr>
<tr>
<td>804</td>
<td>815</td>
<td>817</td>
<td>872</td>
</tr>
<tr>
<td>802</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>-126</td>
<td>-134</td>
<td>-148</td>
<td>-150</td>
</tr>
<tr>
<td>512</td>
<td>497</td>
<td>508</td>
<td>512</td>
</tr>
<tr>
<td>879</td>
<td></td>
<td>-874</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>-156</td>
<td>-158</td>
<td>-171</td>
<td>-189</td>
</tr>
<tr>
<td>540</td>
<td>542</td>
<td>546</td>
<td>548</td>
</tr>
<tr>
<td>905</td>
<td>908</td>
<td>910</td>
<td>911</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>-190</td>
<td>-203</td>
<td>-206</td>
<td>-208</td>
</tr>
<tr>
<td>549</td>
<td>574</td>
<td>583</td>
<td>590</td>
</tr>
<tr>
<td>913</td>
<td>919</td>
<td>925</td>
<td>926</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>-201</td>
<td>-251</td>
<td>-300</td>
<td>-301</td>
</tr>
<tr>
<td>577</td>
<td>590</td>
<td>601</td>
<td>604</td>
</tr>
<tr>
<td>922</td>
<td>926</td>
<td>20005</td>
<td>20071</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>-312</td>
<td>-313</td>
<td>-332</td>
<td>-332</td>
</tr>
<tr>
<td>614</td>
<td>616</td>
<td>617</td>
<td>617</td>
</tr>
<tr>
<td>30081</td>
<td>30082</td>
<td>00C12018</td>
<td>00C12019</td>
</tr>
<tr>
<td></td>
<td></td>
<td>00E20018</td>
<td>00E20019</td>
</tr>
<tr>
<td></td>
<td></td>
<td>00E2001A</td>
<td>00E2001C</td>
</tr>
<tr>
<td></td>
<td></td>
<td>00E2001E</td>
<td>00E2001F</td>
</tr>
<tr>
<td></td>
<td></td>
<td>00E20020</td>
<td>00E20021</td>
</tr>
<tr>
<td></td>
<td></td>
<td>00E20022</td>
<td>00E20023</td>
</tr>
</tbody>
</table>

Appendix D. New, Changed, and Deleted Messages and Codes 1077
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>DSNJ003I</td>
<td>DSNT474I</td>
<td>DSNU397I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DSNJ070I</td>
<td># DSNT482I</td>
<td>DSNU400I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DSNJ073I</td>
<td>DSNT501I</td>
<td>DSNU402I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DSNJ104I</td>
<td>DSNT516I</td>
<td>DSNU406I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DSNJ110E</td>
<td>DSNT720I</td>
<td>DSNU409I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DSNJ113E</td>
<td>DSNT736I</td>
<td>DSNU410I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DSNJ151I</td>
<td>DSNT803I</td>
<td>DSNU411I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DSNJ313I</td>
<td>DSNT814I</td>
<td>DSNU412I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DSNJ319I</td>
<td># DSNU032I</td>
<td>DSNU413I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DSNJ341I</td>
<td>DSNU042I</td>
<td>DSNU414I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DSNJ372I</td>
<td># DSNU067I</td>
<td>DSNU418I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DSNJ515I</td>
<td># DSNU069I</td>
<td>DSNU419I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DSNL004I</td>
<td>DSNU074I</td>
<td>DSNU421I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DSNL027I</td>
<td># DSNU075I</td>
<td>DSNU422I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DSNL044I</td>
<td># DSNU076I</td>
<td>DSNU423I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DSNL202I</td>
<td>DSNU100I</td>
<td>DSNU426I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DSNL511I</td>
<td>DSNU105I</td>
<td>DSNU443I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DSNL512I</td>
<td>DSNU203I</td>
<td>DSNU446I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DSNL516I</td>
<td>DSNU206I</td>
<td>DSNU447I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DSNL517I</td>
<td>DSNU208I</td>
<td>DSNU481I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DSNL101I</td>
<td>DSNU214I</td>
<td>DSNU503I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DSNL102I</td>
<td>DSNU219I</td>
<td>DSNU504I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DSNL201I</td>
<td>DSNU241I</td>
<td>DSNU505I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DSNL203I</td>
<td>DSNU245I</td>
<td>DSNU506I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DSNL206I</td>
<td>DSNU252I</td>
<td>DSNU510I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DSNL245I</td>
<td>DSNU254I</td>
<td>DSNU511I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DSNL252I</td>
<td>DSNU255I</td>
<td>DSNU512I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DSNL253I</td>
<td># DSNU256I</td>
<td>DSNU514I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DSNL254I</td>
<td>DSNU260I</td>
<td>DSNU515I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DSNL255I</td>
<td># DSNU269I</td>
<td>DSNU516I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DSNL262I</td>
<td># DSNU271I</td>
<td># DSNU518I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DSNL367I</td>
<td>DSNU297I</td>
<td>DSNU521I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DSNL368I</td>
<td>DSNU302I</td>
<td>DSNU524I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DSNL376I</td>
<td>DSNU304I</td>
<td>DSNU525I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DSNL377I</td>
<td># DSNU310I</td>
<td>DSNU526I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DSNL378I</td>
<td>DSNU313I</td>
<td>DSNU527I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DSNL379I</td>
<td>DSNU324I</td>
<td>DSNU529I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DSNL389I</td>
<td># DSNU334I</td>
<td>DSNU532I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DSNL391I</td>
<td># DSNU337I</td>
<td>DSNU533I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DSNL396I</td>
<td>DSNU344I</td>
<td>DSNU534I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DSNL397I</td>
<td>DSNU345I</td>
<td>DSNU535I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DSNL406I</td>
<td>DSNU348I</td>
<td>DSNU537I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DSNL407I</td>
<td>DSNU349I</td>
<td>DSNU541I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DSNL409I</td>
<td>DSNU353I</td>
<td>DSNU542I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DSNL410I</td>
<td>DSNU354I</td>
<td>DSNU543I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DSNL416I</td>
<td>DSNU360I</td>
<td>DSNU544I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DSNL428I</td>
<td>DSNU361I</td>
<td>DSNU545I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DSNL429I</td>
<td>DSNU367I</td>
<td>DSNU546I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DSNL440I</td>
<td>DSNU378I</td>
<td>DSNU547I</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Changed SQLSTATEs

The following SQLSTATEs are changed:

- 01616
- 56052

Deleted messages and codes

These messages and codes were deleted:

- All DSNC Messages
- -594
- -707
- -772
- -965
- 00C30002
- 00E30011
- 00E30016
- 00E30018
- 00E30019
- 00E3001A

2023
00E30093
00E30094
00E79000
00E79005
00E79009
00E7900A
00E7900D
DSNH315I
DSNT303I
DSNT484I
DSNT432I
DSNX900E
DSNX902E
DSNX903E
DSNX904E
DSNX909E
DSNX910E
DSNX911E
DSNX912E
DSNX948I
DSNX949I
Appendix E. Notices

This information was developed for products and services offered in the U.S.A. IBM may not offer the products, services, or features discussed in this document in other countries. Consult your local IBM representative for information on the products and services currently available in your area. Any reference to an IBM product, program, or service is not intended to state or imply that only that IBM product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any IBM intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any non-IBM product, program, or service.

IBM may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not give you any license to these patents. You can send license inquiries, in writing, to:

IBM Director of Licensing
IBM Corporation
North Castle Drive
Armonk, NY 10504-1785
U.S.A.

For license inquiries regarding double-byte (DBCS) information, contact the IBM Intellectual Property Department in your country or send inquiries, in writing, to:

IBM World Trade Asia Corporation
Licensing
2-31 Roppongi 3-chome, Minato-ku
Tokyo 106, Japan

The following paragraph does not apply to the United Kingdom or any other country where such provisions are inconsistent with local law: INTERNATIONAL BUSINESS MACHINES CORPORATION PROVIDES THIS PUBLICATION “AS IS” WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some states do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. IBM may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

Any references in this publication to non-IBM Web sites are provided for convenience only and do not in any manner serve as an endorsement of those Web sites. The materials at those Web sites are not part of the materials for this IBM product and use of those Web sites is as your own risk.

Licensees of this program who wish to have information about it for the purpose of enabling: (i) the exchange of information between independently created programs and other programs (including this one) and (ii) the mutual use of the information which has been exchanged, should contact:
Such information may be available, subject to appropriate terms and conditions, including in some cases, payment of a fee.

The licensed program described in this information and all licensed material available for it are provided by IBM under terms of the IBM Customer Agreement, IBM International Program License Agreement, or any equivalent agreement between us.

This information contains examples of data and reports used in daily business operations. To illustrate them as completely as possible, the examples include the names of individuals, companies, brands, and products. All of these names are fictitious and any similarity to the names and addresses used by an actual business enterprise is entirely coincidental.

COPYRIGHT LICENSE:

This information contains sample application programs in source language, which illustrates programming techniques on various operating platforms. You may copy, modify, and distribute these sample programs in any form without payment to IBM, for the purposes of developing, using, marketing or distributing application programs conforming to the application programming interface for the operating platform for which the sample programs are written. These examples have not been thoroughly tested under all conditions. IBM, therefore, cannot guarantee or imply reliability, serviceability, or function of these programs.

---

**Programming interface information**

This book is intended to help you interpret messages issued by IBM DATABASE 2 Universal Database Server for OS/390 (DB2 for OS/390).

This book also documents General-use Programming Interface and Associated Guidance Information provided by DB2 for OS/390.

General-use programming interfaces allow the customer to write programs that obtain the services of DB2 for OS/390.

General-use Programming Interface and Associated Guidance Information is identified where it occurs by an introductory statement to a chapter or section.

---

**Trademarks**

The following terms are trademarks of the International Business Machines Corporation in the United States, or other countries, or both:
Tivoli™ and NetView are trademarks of Tivoli Systems Inc. in the United States, or other countries, or both.

The following terms are trademarks of other companies as follows:

- Java and all Java-based trademarks and logos are trademarks or registered trademarks of Sun Microsystems, Inc. in the United States and/or other countries.

- Microsoft, Windows, Windows NT, and the Windows logo are trademarks of Microsoft™ Corporation, Inc. in the United States and/or other countries.

Other company, product, and service names may be trademarks or service marks of others.
Glossary

The following terms and abbreviations are defined as they are used in the DB2 library. If you do not find the term you are looking for, refer to the index or to IBM Dictionary of Computing.

A

abend. Abnormal end of task.

abend reason code. A 4-byte hexadecimal code that uniquely identifies a problem with DB2. A complete list of DB2 abend reason codes and their explanations is contained in DB2 Messages and Codes.

abnormal end of task (abend). Termination of a task, job, or subsystem because of an error condition that recovery facilities cannot resolve during execution.

access method services. The facility that is used to define and reproduce VSAM key-sequenced data sets.

access path. The path that is used to locate data that is specified in SQL statements. An access path can be indexed or sequential.

active log. The portion of the DB2 log to which log records are written as they are generated. The active log always contains the most recent log records, whereas the archive log holds those records that are older and no longer fit on the active log.

active member state. A state of a member of a data sharing group. An active member is identified with a group by XCF, which associates the member with a particular task, address space, and MVS system. A member that is not active has either a failed member state or a quiesced member state.

active log. The portion of the DB2 log to which log records are written as they are generated. The active log always contains the most recent log records, whereas the archive log holds those records that are older and no longer fit on the active log.

application plan. The control structure that is produced during the bind process. DB2 uses the application plan to process SQL statements that it encounters during statement execution.

archive log. The portion of the DB2 log that contains log records that have been copied from the active log.

agent. As used in DB2, the structure that associates all processes that are involved in a DB2 unit of work. An allied agent is generally synonymous with an allied thread. System agents are units of work that process independently of the allied agent, such as prefetch processing, deferred writes, and service tasks.

alias. An alternative name that can be used in SQL statements to refer to a table or view in the same or a remote DB2 subsystem.

allied address space. An area of storage that is external to DB2 and that is connected to DB2. An allied address space is capable of requesting DB2 services.

allied thread. A thread that originates at the local DB2 subsystem and that can access data at a remote DB2 subsystem.

American National Standards Institute (ANSI). An organization consisting of producers, consumers, and general interest groups, that establishes the procedures by which accredited organizations create and maintain voluntary industry standards in the United States.

ANSI. American National Standards Institute.

APAR. Authorized program analysis report.

APAR fix corrective service. A temporary correction of a DB2 defect. The correction is temporary, because it is usually replaced at a later date by a more permanent correction, such as a program temporary fix (PTF).

APF. Authorized program facility.

APPL. A VTAM network definition statement that is used to define DB2 to VTAM as an application program that uses SNA LU 6.2 protocols.

application plan. The control structure that is produced during the bind process. DB2 uses the application plan to process SQL statements that it encounters during statement execution.

application process. The unit to which resources and locks are allocated. An application process involves the execution of one or more programs.

application requester (AR). See requester.

application server (AS). See server.

AR. Application requester. See requester.

archive log. The portion of the DB2 log that contains log records that have been copied from the active log.

AS. Application server. See server.
ASCII. An encoding scheme that is used to represent strings in many environments, typically on PCs and workstations. Contrast with EBCDIC.

attachment facility. An interface between DB2 and TSO, IMS, CICS, or batch address spaces. An attachment facility allows application programs to access DB2.

attribute. A characteristic of an entity. For example, in database design, the phone number of an employee is one of that employee's attributes.

authorization ID. A string that can be verified for connection to DB2 and to which a set of privileges are allowed. It can represent an individual, an organizational group, or a function, but DB2 does not determine this representation.

authorized program analysis report (APAR). A report of a problem that is caused by a suspected defect in a current release of an IBM licensed program.

authorized program facility (APF). A facility that permits the identification of programs that are authorized to use restricted functions.

backward log recovery. The fourth and final phase of restart processing during which DB2 scans the log in a backward direction to apply UNDO log records for all aborted changes.

base table. (1) A table that is created by the SQL CREATE TABLE statement and that holds persistent data. Contrast with result table and temporary table.

(2) A table containing a LOB column definition. The actual LOB column data is not stored with the base table. The base table contains a row identifier for each row and an indicator column for each of its LOB columns. Contrast with auxiliary table.

basic sequential access method (BSAM). An access method for storing or retrieving data blocks in a continuous sequence, using either a sequential access or a direct access device.

binary large object (BLOB). A sequence of bytes, where the size of the value ranges from 0 bytes to 2 GB - 1. Such a string does not have an associated CCSID.

bind. The process by which the output from the DB2 precompiler is converted to a usable control structure (which is called a package or an application plan). During the process, access paths to the data are selected and some authorization checking is performed.

automatic bind. (More correctly automatic rebind). A process by which SQL statements are bound automatically (without a user issuing a BIND command) when an application process begins execution and the bound application plan or package it requires is not valid.

dynamic bind. A process by which SQL statements are bound as they are entered.

incremental bind. A process by which SQL statements are bound during the execution of an application process, because they could not be bound during the bind process, and VALIDATE(RUN) was specified.

static bind. A process by which SQL statements are bound after they have been precompiled. All static SQL statements are prepared for execution at the same time.

BLOB. Binary large object.

BMP. Batch Message Processing (IMS).

bootstrap data set (BSDS). A VSAM data set that contains name and status information for DB2, as well as RBA range specifications, for all active and archive log data sets. It also contains passwords for the DB2 directory and catalog, and lists of conditional restart and checkpoint records.

BSAM. Basic sequential access method.

BSDS. Bootstrap data set.

buffer pool. Main storage that is reserved to satisfy the buffering requirements for one or more table spaces or indexes.

built-in function. A function that DB2 supplies. Contrast with user-defined function.

C

cache structure. A coupling facility structure that stores data that can be available to all members of a Sysplex. A DB2 data sharing group uses cache structures as group buffer pools.

CAF. Call attachment facility.

call attachment facility (CAF). A DB2 attachment facility for application programs that run in TSO or MVS batch. The CAF is an alternative to the DSN command processor and provides greater control over the execution environment.

cascade delete. The way in which DB2 enforces referential constraints when it deletes all descendent rows of a deleted parent row.

cast function. A function that is used to convert instances of a (source) data type into instances of a different (target) data type. In general, a cast function has
the name of the target data type. It has one single argument whose type is the source data type; its return type is the target data type.

castout. The DB2 process of writing changed pages from a group buffer pool to DASD.

catalog. In DB2, a collection of tables that contains descriptions of objects such as tables, views, and indexes.

catalog table. Any table in the DB2 catalog.

CCSID. Coded character set identifier.

CDB. Communications database.

CEC. Central electronic complex. See central processor complex.


central processor (CP). The part of the computer that contains the sequencing and processing facilities for instruction execution, initial program load, and other machine operations.

central processor complex (CPC). A physical collection of hardware (such as an ES/3090) that consists of main storage, one or more central processors, timers, and channels.

CFRM policy. A declaration by an MVS administrator regarding the allocation rules for a coupling facility structure.

character large object (CLOB). A sequence of bytes representing single-byte characters or a mixture of single- and double-byte characters where the size of the value can be up to 2 GB - 1. In general, character large object values are used whenever a character string might exceed the limits of the VARCHAR type.

CHECK clause. An extension to the SQL CREATE TABLE and SQL ALTER TABLE statements that specifies a table check constraint. See also table check constraint.

check constraint. See table check constraint.

check integrity. The condition that exists when each row in a table conforms to the table check constraints that are defined on that table. Maintaining check integrity requires DB2 to enforce table check constraints on operations that add or change data.

check pending. A state of a table space or partition that prevents its use by some utilities and some SQL statements because of rows that violate referential constraints, table check constraints, or both.

checkpoint. A point at which DB2 records internal status information on the DB2 log; the recovery process uses this information if DB2 abnormally terminates.

CI. Control interval.

CICS. Represents (in this publication) one of the following products:

- CICS Transaction Server for OS/390: Customer Information Control Center Transaction Server for OS/390
- CICS/ESA: Customer Information Control System/Enterprise Systems Architecture
- CICS/MVS: Customer Information Control System/Multiple Virtual Storage

CICS attachment facility. A DB2 subcomponent that uses the MVS subsystem interface (SSI) and cross storage linkage to process requests from CICS to DB2 and to coordinate resource commitment.

CIDF. Control interval definition field.

claim. A notification to DB2 that an object is being accessed. Claims prevent drains from occurring until the claim is released, which usually occurs at a commit point. Contrast with drain.

claim class. A specific type of object access that can be one of the following:

- Cursor stability (CS)
- Repeatable read (RR)
- Write

claim count. A count of the number of agents that are accessing an object.

class of service. A VTAM term for a list of routes through a network, arranged in an order of preference for their use.

clause. In SQL, a distinct part of a statement, such as a SELECT clause or a WHERE clause.

client. See requester.

CLIST. Command list. A language for performing TSO tasks.

CLOB. Character large object.

closed application. An application that requires exclusive use of certain statements on certain DB2 objects, so that the objects are managed solely through the application's external interface.

clustering index. An index that determines how rows are physically ordered in a table space.
**coded character set**. A set of unambiguous rules that establish a character set and the one-to-one relationships between the characters of the set and their coded representations.

**coded character set identifier (CCSID)**. A 16-bit number that uniquely identifies a coded representation of graphic characters. It designates an encoding scheme identifier and one or more pairs consisting of a character set identifier and an associated code page identifier.

**code page**. A set of assignments of characters to code points.

**code point**. In CDRA, a unique bit pattern that represents a character in a code page.

**coexistence**. During migration, the period of time in which two releases exist in the same data sharing group.

**cold start**. A process by which DB2 restarts without processing any log records. Contrast with warm start.

**collection**. A group of packages that have the same qualifier.

**column**. The vertical component of a table. A column has a name and a particular data type (for example, character, decimal, or integer).

**column function**. An SQL operation that derives its result from a collection of values across one or more rows. Contrast with scalar function.

**command**. A DB2 operator command or a DSN subcommand. A command is distinct from an SQL statement.

**command prefix**. A one- to eight-character command identifier. The command prefix distinguishes the command as belonging to an application or subsystem rather than to MVS.

**command recognition character (CRC)**. A character that permits an MVS console operator or an IMS subsystem user to route DB2 commands to specific DB2 subsystems.

**command scope**. The scope of command operation in a data sharing group. If a command has **member scope**, the command displays information only from the one member or affects only non-shared resources that are owned locally by that member. If a command has **group scope**, the command displays information from all members, affects non-shared resources that are owned locally by all members, displays information on sharable resources, or affects sharable resources.

**commit**. The operation that ends a unit of work by releasing locks so that the database changes that are made by that unit of work can be perceived by other processes.

**commit point**. A point in time when data is considered consistent.

**common service area (CSA)**. In MVS, a part of the common area that contains data areas that are addressable by all address spaces.

**communications database (CDB)**. A set of tables in the DB2 catalog that are used to establish conversations with remote database management systems.

**comparison operator**. A token (such as ≤, ≥, <) that is used to specify a relationship between two values.

**compression dictionary**. The dictionary that controls the process of compression and decompression. This dictionary is created from the data in the table space or table space partition.

**concurrency**. The shared use of resources by more than one application process at the same time.

**conditional restart**. A DB2 restart that is directed by a user-defined conditional restart control record (CRCR).

**connection**. In SNA, the existence of a communication path between two partner LUs that allows information to be exchanged (for example, two DB2 subsystems that are connected and communicating by way of a conversation).

**connection ID**. An identifier that is supplied by the attachment facility and that is associated with a specific address space connection.

**consistency token**. A timestamp that is used to generate the version identifier for an application. See also version.

**constant**. A language element that specifies an unchanging value. Constants are classified as string constants or numeric constants. Contrast with variable.

**constraint**. A rule that limits the values that can be inserted, deleted, or updated in a table. See referential constraint, table check constraint, and uniqueness constraint.

**control interval (CI)**. A fixed-length area or direct access storage in which VSAM stores records and creates distributed free space. Also, in a key-sequenced data set or file, the set of records pointed to by an entry in the sequence-set index record. The control interval is the unit of information that VSAM transmits to or from direct access storage. A control interval always includes an integral number of physical records.
control interval definition field (CIDF). In VSAM, a field located in the 4 bytes at the end of each control interval; it describes the free space, if any, in the control interval.

conversation. Communication, which is based on LU 6.2 or Advanced Program-to-Program Communication (APPC), between an application and a remote transaction program over an SNA logical unit-to-logical unit (LU-LU) session that allows communication while processing a transaction.

coordinator. The system component that coordinates the commit or rollback of a unit of work that includes work that is done on one or more other systems.

correlated subquery. A subquery (part of a WHERE or HAVING clause) that is applied to a row or group of rows of a table or view that is named in an outer subselect statement.

correlation ID. An identifier that is associated with a specific thread. In TSO, it is either an authorization ID or the job name.

correlation name. An identifier that designates a table, a view, or individual rows of a table or view within a single SQL statement. It can be defined in any FROM clause or in the first clause of an UPDATE or DELETE statement.

coupling facility. A special PR/SM™ LPAR logical partition that runs the coupling facility control program and provides high-speed caching, list processing, and locking functions in a Sysplex.

CP. See central processor (CP).

CPC. Central processor complex.

CRC. Command recognition character.

CRCR. Conditional restart control record. See also conditional restart.

created temporary table. A table that holds temporary data and is defined with the SQL statement CREATE GLOBAL TEMPORARY TABLE. Information about created temporary tables is stored in the DB2 catalog, so this kind of table is persistent and can be shared across application processes. Contrast with declared temporary table. See also temporary table.

cross-system coupling facility (XCF). A component of MVS that provides functions to support cooperation between authorized programs running within a Sysplex.

cross-system extended services (XES). A set of MVS services that allow multiple instances of an application or subsystem, running on different systems in a Sysplex environment, to implement high-performance, high-availability data sharing by using a coupling facility.

cursor stability (CS). The isolation level that provides maximum concurrency without the ability to read uncommitted data. With cursor stability, a unit of work holds locks only on its uncommitted changes and on the current row of each of its cursors.

database. A collection of tables, or a collection of table spaces and index spaces.

database access thread. A thread that accesses data at the local subsystem on behalf of a remote subsystem.

database administrator (DBA). An individual who is responsible for designing, developing, operating, safeguarding, maintaining, and using a database.

database descriptor (DBD). An internal representation of a DB2 database definition, which reflects the data definition that is in the DB2 catalog. The objects that are defined in a database descriptor are table spaces, tables, indexes, index spaces, and relationships.

database exception status. An indication that something is wrong with a database. All members of a data sharing group must know and share the exception status of databases.

database request module (DBRM). A data set member that is created by the DB2 precompiler and that contains information about SQL statements. DBRMs are used in the bind process.

DATABASE 2 Interactive (DB2I). The DB2 facility that provides for the execution of SQL statements, DB2 (operator) commands, programmer commands, and utility invocation.
data currency. The state in which data that is
retrieved into a host variable in your program is a copy
of data in the base table.

data definition name (ddname). The name of a data
definition (DD) statement that corresponds to a data
control block containing the same name.

Data Language/I (DL/I). The IMS data manipulation
language; a common high-level interface between a
user application and IMS.

data partition. A VSAM data set that is contained
within a partitioned table space.

data sharing. The ability of two or more DB2 subsys-
tems to directly access and change a single set of data.

data sharing group. A collection of one or more DB2
subsystems that directly access and change the same
data while maintaining data integrity.

data sharing member. A DB2 subsystem that is
assigned by XCF services to a data sharing group.

data space. A range of up to 2 GB of contiguous
virtual storage addresses that a program can directly
manipulate. Unlike an address space, a data space can
hold only data; it does not contain common areas,
system data, or programs.

data type. An attribute of columns, literals, host vari-
ables, special registers, and the results of functions and
expressions.

date. A three-part value that designates a day, month,
and year.

date duration. A decimal integer that represents a
number of years, months, and days.

datetime value. A value of the data type DATE, TIME,
or TIMESTAMP.

DBA. Database administrator.

DBCLOB. Double-byte character large object.

DBD. Database descriptor.

DBID. Database identifier.

DBMS. Database management system.

DBRM. Database request module.

DB2 catalog. Tables that are maintained by DB2 and
that contain descriptions of DB2 objects, such as tables,
views, and indexes.

DB2 command. An instruction to the DB2 subsystem
allowing a user to start or stop DB2, to display informa-
tion on current users, to start or stop databases, to
display information on the status of databases, and so
on.

DB2 for VSE & VM. The IBM DB2 relational database
management system for the VSE and VM operating
systems.

DB2I. DATABASE 2 Interactive.

DCE. OS/390 OpenEdition Distributed Computing
Environment.

DCE ticket. A transparent application mechanism that
transmits the identity of an initiating principal to its
target. A simple ticket contains the principal's identity, a
session key, a timestamp, and other information, which
is sealed using the target's secret key.

DCLGEN. Declarations generator.

DDF. Distributed data facility.

ddname. Data definition name.

deadlock. Unresolvable contention for the use of a
resource such as a table or an index.

declarations generator (DCLGEN). A subcomponent
of DB2 that generates SQL table declarations and
COBOL, C, or PL/I data structure declarations that
conform to the table. The declarations are generated
from DB2 system catalog information. DCLGEN is also
a DSN subcommand.

# declared temporary table. A table that holds tempo-
# rary data and is defined with the SQL statement
# DECLARE GLOBAL TEMPORARY TABLE. Information
# about declared temporary tables is not stored in the
# DB2 catalog, so this kind of table is not persistent and
# can only be used by the application process that issued
# the DECLARE statement. Contrast with created tempo-
# rary table. See also temporary table.

default value. A predetermined value, attribute, or
option that is assumed when no other is explicitly speci-
fied.

degree of parallelism. The number of concurrently
executed operations that are initiated to process a
query.

DFHSM. Data Facility Hierarchical Storage Manager.

DFP. Data Facility Product (MVS).

# dimension. A data category such as time, products, or
# markets. The elements of a dimension are referred to
# as members. Dimensions offer a very concise, intuitive
# way of organizing and selecting data for retrieval, explo-
# ration, and analysis. See also dimension table.
# dimension table. The representation of a dimension in a star schema. Each row in a dimension table represents all of the attributes for a particular member of the dimension. See also dimension, star schema, and star join.

direct access storage device (DASD). A device in which access time is independent of the location of the data.

distinct type. A user-defined data type that is internally represented as an existing type (its source type), but is considered to be a separate and incompatible type for semantic purposes.

Distributed Computing Environment MVS/ESA (DCE MVS/ESA). A set of technologies that are provided by the Open Software Foundation to implement distributed computing.

distributed data facility (DDF). A set of DB2 components through which DB2 communicates with another RDBMS.

Distributed Relational Database Architecture (DRDA). A connection protocol for distributed relational database processing that is used by IBM’s relational database products. DRDA includes protocols for communication between an application and a remote relational database management system, and for communication between relational database management systems.

DL/I. Data Language/I.

double-byte character large object (DBCLOB). A sequence of bytes representing double-byte characters where the size of the values can be up to 2 GB. In general, double-byte character large object values are used whenever a double-byte character string might exceed the limits of the VARGRAPHIC type.

drain. The act of acquiring a locked resource by quiescing access to that object.

drain lock. A lock on a claim class that prevents a claim from occurring.

DRDA. Distributed Relational Database Architecture.

DRDA access. A method of accessing distributed data by which you can connect to another location, using an SQL statement, to execute packages that have been previously bound at that location. The SQL CONNECT or three-part name statement is used to identify application servers, and SQL statements are executed using packages that were previously bound at those servers. Contrast with private protocol access.

DSN. (1) The default DB2 subsystem name. (2) The name of the TSO command processor of DB2. (3) The first three characters of DB2 module and macro names.

duration. A number that represents an interval of time. See date duration, labeled duration, and time duration.

dynamic dump. A dump that is issued during the execution of a program, usually under the control of that program.

dynamic SQL. SQL statements that are prepared and executed within an application program while the program is executing. In dynamic SQL, the SQL source is contained in host language variables rather than being coded into the application program. The SQL statement can change several times during the application program's execution.

E

| EA-enabled table space. A table space or index space that is enabled for extended addressability and that contains individual partitions (or pieces, for LOB table spaces) that are greater than 4 GB. |

| EBCDIC. Extended binary coded decimal interchange code. An encoding scheme that is used to represent character data in the OS/390, MVS, VM, VSE, and OS/400® environments. Contrast with ASCII. |

| EDM pool. A pool of main storage that is used for database descriptors, application plans, authorization cache, application packages, and dynamic statement caching. |

| EID. Event identifier. |

| embedded SQL. SQL statements that are coded within an application program. See static SQL. |

| EOM. End of memory. |

| EOT. End of task. |

error page range. A range of pages that are considered to be physically damaged. DB2 does not allow users to access any pages that fall within this range.

equi-join. A join operation in which the join-condition has the form expression = expression.

escape character. The symbol that is used to enclose an SQL delimited identifier. The escape character is the double quotation mark ("), except in COBOL applications, where the user assigns the symbol, which is either a double quotation mark or an apostrophe (’). 

ESDS. Entry sequenced data set.
ESMT.  External subsystem module table (IMS).

EUR.  IBM European Standards.

exception table. A table that holds rows that violate referential constraints or table check constraints that the CHECK DATA utility finds.

exclusive lock. A lock that prevents concurrently executing application processes from reading or changing data. Contrast with shared lock.

exit routine. A user-written (or IBM-provided default) program that receives control from DB2 to perform specific functions. Exit routines run as extensions of DB2.

explicit hierarchical locking. Locking that is used to make the parent-child relationship between resources known to IRLM. This kind of locking avoids global locking overhead when no inter-DB2 interest exists on a resource.

expression. An operand or a collection of operators and operands that yields a single value.

external function. A function for which the body is written in a programming language that takes scalar argument values and produces a scalar result for each invocation. Contrast with sourced function and built-in function.

failed member state. A state of a member of a data sharing group. When a member fails, the XCF permanently records the failed member state. This state usually means that the member's task, address space, or MVS system terminated before the state changed from active to quiesced.

fallback. The process of returning to a previous release of DB2 after attempting or completing migration to a current release.

false global lock contention. A contention indication from the coupling facility when multiple lock names are hashed to the same indicator and when no real contention exists.

field procedure. A user-written exit routine that is designed to receive a single value and transform (encode or decode) it in any way the user can specify.

forget. In a two-phase commit operation, (1) the vote that is sent to the prepare phase when the participant has not modified any data. The forget vote allows a participant to release locks and forget about the logical unit of work. This is also referred to as the read-only vote. (2) The response to the committed request in the second phase of the operation.

forward log recovery. The third phase of restart processing during which DB2 processes the log in a forward direction to apply all REDO log records.

free space. The total amount of unused space in a page. That is, the space that is not used to store records or control information is free space.

full outer join. The result of a join operation that includes the matched rows of both tables that are being joined and preserves the unmatched rows of both tables. See also join.

function. A specific purpose of an entity or its characteristic action such as a column function or scalar function. (See also column function and scalar function.) Functions can be user-defined, built-in, or generated by DB2. (See built-in function, cast function, external function, sourced function, and user-defined function.)

GB. Gigabyte (1,073,741,824 bytes).

GBP. Group buffer pool.

GBP-dependent. The status of a page set or page set partition that is dependent on the group buffer pool. Either read/write interest is active among DB2 subsystems for this page set, or the page set has changed pages in the group buffer pool that have not yet been cast out to DASD.

generalized trace facility (GTF). An MVS service program that records significant system events such as I/O interrupts, SVC interrupts, program interrupts, or external interrupts.

generic resource name. A name that VTAM uses to represent several application programs that provide the same function in order to handle session distribution and balancing in a Sysplex environment.

getpage. An operation in which DB2 accesses a data page.

global lock. A lock that provides concurrency control within and among DB2 subsystems. The scope of the lock is across all the DB2 subsystems of a data sharing group.

global lock contention. Conflicts on locking requests between different DB2 members of a data sharing group when those members are trying to serialize shared resources.

gross lock. The shared, update, or exclusive mode locks on a table, partition, or table space.
group buffer pool (GBP). A coupling facility cache structure that is used by a data sharing group to cache data and to ensure that the data is consistent for all members.

group buffer pool duplexing. The ability to write data to two instances of a group buffer pool structure: a primary group buffer pool and a secondary group buffer pool. OS/390 publications refer to these instances as the 'old' (for primary) and 'new' (for secondary) structures.

group name. The MVS XCF identifier for a data sharing group.

group restart. A restart of at least one member of a data sharing group after the loss of either locks or the shared communications area.

GTF. Generalized trace facility.

H

heuristic damage. The inconsistency in data between one or more participants that results when a heuristic decision to resolve an indoubt LUW at one or more participants differs from the decision that is recorded at the coordinator.

heuristic decision. A decision that forces indoubt resolution at a participant by means other than automatic resynchronization between coordinator and participant.

hiperspace. A range of up to 2 GB of contiguous virtual storage addresses that a program can use as a buffer. Like a data space, a hiperspace can hold user data; it does not contain common areas or system data. Unlike an address space or a data space, data in a hiperspace is not directly addressable. To manipulate data in a hiperspace, you bring the data into the address space in 4-KB blocks.

host program. An application program that is written in a host language and that contains embedded SQL statements.

host structure. In an application program, a structure that is referenced by embedded SQL statements.

host variable. In an application program, an application variable that is referenced by embedded SQL statements.

HSM. Hierarchical storage manager.

ICF. Integrated catalog facility.

IDCAMS. An IBM program that is used to process access method services commands. It can be invoked as a job or jobstep, from a TSO terminal, or from within a user's application program.

IDCAMS LISTCAT. A facility for obtaining information that is contained in the access method services catalog.

decify. A request that an attachment service program in an address space that is separate from DB2 issues via the MVS subsystem interface to inform DB2 of its existence and to initiate the process of becoming connected to DB2.

# identity column. A column that provides a way for # DB2 to automatically generate a guaranteed-unique # numeric value for each row that is inserted into the # table. Identity columns are defined with the AS IDEN- # TITY clause. A table can have no more than one ident- # tity column.

IFCID. Instrumentation facility component identifier.

IFI. Instrumentation facility interface.

IFI call. An invocation of the instrumentation facility interface (IFI) by means of one of its defined functions.

image copy. An exact reproduction of all or part of a table space. DB2 provides utility programs to make full image copies (to copy the entire table space) or incremental image copies (to copy only those pages that have been modified since the last image copy).

implied forget. In the presumed-abort protocol, an implied response of forget to the second-phase committed request from the coordinator. The response is implied when the participant responds to any subsequent request from the coordinator.

IMS. Information Management System.

IMS attachment facility. A DB2 subcomponent that uses MVS subsystem interface (SSI) protocols and cross-memory linkage to process requests from IMS to DB2 and to coordinate resource commitment.

IMS DB. Information Management System Database.

IMS TM. Information Management System Transaction Manager.

in-abort. A status of a unit of recovery. If DB2 fails after a unit of recovery begins to be rolled back, but before the process is completed, DB2 continues to back out the changes during restart.
in-commit. A status of a unit of recovery. If DB2 fails after beginning its phase 2 commit processing, it “knows,” when restarted, that changes made to data are consistent. Such units of recovery are termed *in-commit*.

index. A set of pointers that are logically ordered by the values of a key. Indexes can provide faster access to data and can enforce uniqueness on the rows in a table.

index key. The set of columns in a table that is used to determine the order of index entries.

index partition. A VSAM data set that is contained within a partitioning index space.

index space. A page set that is used to store the entries of one index.

indicator variable. A variable that is used to represent the null value in an application program. If the value for the selected column is null, a negative value is placed in the indicator variable.

indoubt. A status of a unit of recovery. If DB2 fails after it has finished its phase 1 commit processing and before it has started phase 2, only the commit coordinator knows if an individual unit of recovery is to be committed or rolled back. At emergency restart, if DB2 lacks the information it needs to make this decision, the status of the unit of recovery is *indoubt* until DB2 obtains this information from the coordinator. More than one unit of recovery can be indoubt at restart.

indoubt resolution. The process of resolving the status of an indoubt logical unit of work to either the committed or the rollback state.

inflight. A status of a unit of recovery. If DB2 fails before its unit of recovery completes phase 1 of the commit process, it merely backs out the updates of its unit of recovery at restart. These units of recovery are termed *inflight*.

inner join. The result of a join operation that includes only the matched rows of both tables being joined. See also *join*.

install. The process of preparing a DB2 subsystem to operate as an MVS subsystem.

instrumentation facility component identifier (IFCID). A value that names and identifies a trace record of an event that can be traced. As a parameter on the START TRACE and MODIFY TRACE commands, it specifies that the corresponding event is to be traced.

instrumentation facility interface (IFI). A programming interface that enables programs to obtain online trace data about DB2, to submit DB2 commands, and to pass data to DB2.

Interactive System Productivity Facility (ISPF). An IBM licensed program that provides interactive dialog services.

internal resource lock manager (IRLM). An MVS subsystem that DB2 uses to control communication and database locking.

inter-DB2 R/W interest. A property of data in a table space, index, or partition that has been opened by more than one member of a data sharing group and that has been opened for writing by at least one of those members.

IRLM. Internal resource lock manager.

ISO. International Standards Organization.

isolation level. The degree to which a unit of work is isolated from the updating operations of other units of work. See also *cursor stability, read stability, repeatable read, and uncommitted read*.

ISPF. Interactive System Productivity Facility.

ISPF/PDF. Interactive System Productivity Facility/Program Development Facility.

J

Japanese Industrial Standards Committee (JISC). An organization that issues standards for coding character sets.

JCL. Job control language.

JES. MVS Job Entry Subsystem.

JIS. Japanese Industrial Standard.

job control language (JCL). A control language that is used to identify a job to an operating system and to describe the job's requirements.

Job Entry Subsystem (JES). An IBM licensed program that receives jobs into the system and processes all output data that is produced by the jobs.

join. A relational operation that allows retrieval of data from two or more tables based on matching column values. See also *equi-join, full outer join, inner join, left outer join, outer join, and right outer join*. 

G-12 Messages and Codes
KB • logical lock (L-lock)

K

KB. Kilobyte (1024 bytes).

defined in the description of a table, index, or referential constraint.

key. A column or an ordered collection of columns

key-sequence data set (KSDS). A VSAM file or data

KSDS. Key-sequenced data set.

L

labeled duration. A number that represents a duration
of years, months, days, hours, minutes, seconds, or

large object (LOB). A sequence of bytes representing
bit data, single-byte characters, double-byte characters,
or a mixture of single- and double-byte characters. A
LOB can be up to 2 GB - 1 byte in length. See also
BLOB, CLOB, and DBCLOB.

left outer join. The result of a join operation that
includes the matched rows of both tables that are being
joined, and that preserves the unmatched rows of the
first table. See also join.

list structure. A coupling facility structure that lets
data be shared and manipulated as elements of a
queue.

L-lock. Logical lock.

LOB. Large object.

LOB table space. A table space that contains all the
data for a particular LOB column in the related base
table.

local. A way of referring to any object that the local
DB2 subsystem maintains. A local table, for example, is
a table that is maintained by the local DB2 subsystem.
Contrast with remote.

local lock. A lock that provides intra-DB2 concurrency
control, but not inter-DB2 concurrency control; that is,
sits scope is a single DB2.

local subsystem. The unique RDBMS to which the
user or application program is directly connected (in the
case of DB2, by one of the DB2 attachment facilities).

location name. The name by which DB2 refers to a
particular DB2 subsystem in a network of subsystems.
Contrast with LU name.

lock. A means of controlling concurrent events or
access to data. DB2 locking is performed by the IRLM.

lock duration. The interval over which a DB2 lock is
held.

lock escalation. The promotion of a lock from a row,
page, or LOB lock to a table space lock because the
number of page locks that are concurrently held on a
given resource exceeds a preset limit.

locking. The process by which the integrity of data is
ensured. Locking prevents concurrent users from
accessing inconsistent data.

lock mode. A representation for the type of access
that concurrently running programs can have to a
resource that a DB2 lock is holding.

lock object. The resource that is controlled by a DB2
lock.

lock parent. For explicit hierarchical locking, a lock
that is held on a resource that has child locks that are
lower in the hierarchy; usually the table space or parti-
tion intent locks are the parent locks.

lock promotion. The process of changing the size or
mode of a DB2 lock to a higher level.

lock size. The amount of data controlled by a DB2
lock on table data; the value can be a row, a page, a
LOB, a partition, a table, or a table space.

lock structure. A coupling facility data structure that is
composed of a series of lock entries to support shared
and exclusive locking for logical resources.

log. A collection of records that describe the events
that occur during DB2 execution and that indicate their
sequence. The information thus recorded is used for
recovery in the event of a failure during DB2 execution.

logical claim. A claim on a logical partition of a non-
partitioning index.

logical drain. A drain on a logical partition of a non-
partitioning index.

logical index partition. The set of all keys that refer-
ence the same data partition.

logical lock (L-lock). The lock type that transactions
use to control intra- and inter-DB2 data concurrency
between transactions. Contrast with P-lock.
logically complete. A state in which the concurrent copy process is finished with the initialization of the target objects being copied. The target objects are available for update.

logical page list (LPL). A list of pages that are in error and that cannot be referenced by applications until the pages are recovered. The page is in logical error, because the actual media (coupling facility or DASD) might not contain any errors. Usually a connection to the media has been lost.

logical partition. A set of key or RID pairs in a non-partitioning index that are associated with a particular partition.

logical unit. An access point through which an application program accesses the SNA network in order to communicate with another application program.

logical unit of work (LUW). The processing that a program performs between synchronization points.

logical unit of work identifier (LUWID). A name that uniquely identifies a thread within a network. This name consists of a fully-qualified LU network name, an LUW instance number, and an LUW sequence number.

log initialization. The first phase of restart processing during which DB2 attempts to locate the current end of the log.

log record sequence number (LRSN). A number that DB2 generates and associates with each log record. DB2 also uses the LRSN for page versioning. The LRSNs that a particular DB2 data sharing group generates form a strictly increasing sequence for each DB2 log and a strictly increasing sequence for each page across the DB2 group.

log truncation. A process by which an explicit starting RBA is established. This RBA is the point at which the next byte of log data is to be written.

M

MB. Megabyte (1 048 576 bytes).

member name. The MVS XCF identifier for a particular DB2 subsystem in a data sharing group.

migration. The process of converting a DB2 subsystem with a previous release of DB2 to an updated or current release. In this process, you can acquire the functions of the updated or current release without losing the data you created on the previous release.

modify locks. An L-lock or P-lock with a MODIFY attribute. A list of these active locks is kept at all times in the coupling facility lock structure. If the requesting DB2 fails, that DB2 subsystem's modify locks are converted to retained locks.

MPP. Message processing program (IMS).

multi-site update. Distributed relational database processing in which data is updated in more than one location within a single unit of work.

must-complete. A state during DB2 processing in which the entire operation must be completed to maintain data integrity.

MVS. Multiple Virtual Storage.

MVS/ESA. Multiple Virtual Storage/Enterprise Systems Architecture.

MVS/XA. Multiple Virtual Storage/Extended Architecture.

N

negotiable lock. A lock whose mode can be downgraded, by agreement among contending users, to be compatible to all. A physical lock is an example of a negotiable lock.

network identifier (NID). The network ID that is assigned by IMS or CICS, or if the connection type is RRSAF, the OS/390 RRS Unit of Recovery ID (URID).

NID. Network ID.

nonpartitioning index. Any index that is not a partitioning index.

NRE. Network recovery element.

NUL. In C, a single character that denotes the end of the string.

null. A special value that indicates the absence of information.
NUL-terminated host variable. A varying-length host variable in which the end of the data is indicated by the presence of a NUL terminator.

NUL terminator. In C, the value that indicates the end of a string. For character strings, the NUL terminator is X’00’.

parallel I/O processing. A form of I/O processing in which DB2 initiates multiple concurrent requests for a single user query and performs I/O processing concurrently (in parallel), on multiple data partitions.

Parallel Sysplex. A set of MVS systems that communicate and cooperate with each other through certain multisystem hardware components and software services to process customer workloads.

parallel task. The execution unit that is dynamically created to process a query in parallel. It is implemented by an MVS service request block.

participant. An entity other than the commit coordinator that takes part in the commit process. The term participant is synonymous with agent in SNA.

partition. A portion of a page set. Each partition corresponds to a single, independently extendable data set. Partitions can be extended to a maximum size of 1, 2, or 4 GB, depending on the number of partitions in the partitioned page set. All partitions of a given page set have the same maximum size.

partitioned data set (PDS). A data set in direct access storage that is divided into partitions, which are called members. Each partition can contain a program, part of a program, or data. The term partitioned data set is synonymous with program library.

partitioned page set. A partitioned table space or an index space. Header pages, space map pages, data pages, and index pages reference data only within the scope of the partition.

partitioned table space. A table space that is subdivided into parts (based on index key range), each of which can be processed independently by utilities.

PCT. Program control table (CICS).

PDS. Partitioned data set.

piece. A data set of a nonpartitioned page set.

physical claim. A claim on an entire nonpartitioning index.

physical consistency. The state of a page that is not in a partially changed state.

physical drain. A drain on an entire nonpartitioning index.

physical lock (P-lock). A lock type that DB2 acquires to provide consistency of data that is cached in different DB2 subsystems. Physical locks are used only in data sharing environments. Contrast with logical lock (L-lock).
physical lock contention.  Conflicting states of the requesters for a physical lock. See negotiable lock.

physically complete.  The state in which the concurrent copy process is completed and the output data set has been created.

plan.  See application plan.

plan allocation.  The process of allocating DB2 resources to a plan in preparation to execute it.

plan name.  The name of an application plan.

P-lock.  Physical lock.

point of consistency.  A time when all recoverable data that an application accesses is consistent with other data. The term point of consistency is synonymous with sync point or commit point.

policy.  See CFRM policy.

PPT.  (1) Processing program table (CICS).  (2) Program properties table (MVS).

precompilation.  A processing of application programs containing SQL statements that takes place before compilation. SQL statements are replaced with statements that are recognized by the host language compiler. Output from this precompilation includes source code that can be submitted to the compiler and the database request module (DBRM) that is input to the bind process.

predicate.  An element of a search condition that expresses or implies a comparison operation.

prefix.  A code at the beginning of a message or record.

preformat.  The process of preparing a VSAM ESDS for DB2 use, by writing specific data patterns.

prepare.  The first phase of a two-phase commit process in which all participants are requested to prepare for commit.

presumed-abort.  An optimization of the presumed-nothing two-phase commit protocol that reduces the number of recovery log records, the duration of state maintenance, the number of messages between coordinator and participant, and that modifies the indoubt resolution responsibility.

presumed-nothing.  The standard two-phase commit protocol that defines coordinator and participant responsibilities, relative to logical unit of work states, recovery logging, and indoubt resolution.

primary authorization ID.  The authorization ID used to identify the application process to DB2.

primary group buffer pool.  For a duplexed group buffer pool, the structure used to maintain the coherency of cached data. This structure is used for page registration and cross-invalidation. The OS/390 equivalent is old structure. Compare with secondary group buffer pool.

private connection.  A communications connection that is specific to DB2.

private protocol access.  A method of accessing distributed data by which you can direct a query to another DB2 system. Contrast with DRDA access.

private protocol connection.  A DB2 private connection of the application process. See also private connection.

privilege.  The capability of performing a specific function, sometimes on a specific object. The term includes:

  explicit privileges, which have names and are held as the result of SQL GRANT and REVOKE statements. For example, the SELECT privilege.

  implicit privileges, which accompany the ownership of an object, such as the privilege to drop a synonym one owns, or the holding of an authority, such as the privilege of SYSADM authority to terminate any utility job.

protected conversation.  A VTAM conversation that supports two-phase commit flows.

PSRCP.  Page set recovery pending.

Q

QMF.  Query Management Facility.

query CP parallelism.  Parallel execution of a single query, which is accomplished by using multiple tasks. See also Sysplex query parallelism.

query I/O parallelism.  Parallel access of data, which is accomplished by triggering multiple I/O requests within a single query.

quiesced member state.  A state of a member of a data sharing group. An active member becomes quiesced when a STOP DB2 command takes effect without a failure. If the member's task, address space, or MVS system fails before the command takes effect, the member state is failed.
Glossary G-17

R

RACF. Resource Access Control Facility.

RBA. Relative byte address.

RCT. Resource control table (CICS attachment facility).

RDB. Relational database.

RDBMS. Relational database management system.

RDBNAM. Relational database name.

RDF. Record definition field.

read stability (RS). An isolation level that is similar to repeatable read but does not completely isolate an application process from all other concurrently executing application processes. Under level RS, an application that issues the same query more than once might read additional rows that were inserted and committed by a concurrently executing application process.

rebind. The creation of a new application plan for an application program that has been bound previously. If, for example, you have added an index for a table that your application accesses, you must rebind the application in order to take advantage of that index.

rebuild. The process of reallocating a coupling facility structure. For the shared communications area (SCA) and lock structure, the structure is repopulated; for the group buffer pool, changed pages are usually cast out to DASD, and the new structure is populated only with changed pages that were not successfully cast out.

recovery. The process of rebuilding databases after a system failure.

recovery log. A collection of records that describes the events that occur during DB2 execution and indicates their sequence. The recorded information is used for recovery in the event of a failure during DB2 execution.

recovery pending (RECP). A condition that prevents SQL access to a table space that needs to be recovered.

recovery token. An identifier for an element that is used in recovery (for example, NID or URID).

RECP. Recovery pending.

redo. A state of a unit of recovery that indicates that changes are to be reapplied to the DASD media to ensure data integrity.

referential constraint. The requirement that nonnull values of a designated foreign key are valid only if they equal values of the primary key of a designated table.

relational database (RDB). A database that can be perceived as a set of tables and manipulated in accordance with the relational model of data.

relational database management system (RDBMS). A collection of hardware and software that organizes and provides access to a relational database.

relational database name (RDBNAM). A unique identifier for an RDBMS within a network. In DB2, this must be the value in the LOCATION column of table SYSIBM.LOCATIONS in the CDB. DB2 publications refer to the name of another RDBMS as a LOCATION value or a location name.

relative byte address (RBA). The offset of a data record or control interval from the beginning of the storage space that is allocated to the data set or file to which it belongs.

remigration. The process of returning to a current release of DB2 following a fallback to a previous release. This procedure constitutes another migration process.

remote. Any object that is maintained by a remote DB2 subsystem (that is, by a DB2 subsystem other than the local one). A remote view, for example, is a view that is maintained by a remote DB2 subsystem. Contrast with local.

repeatable read (RR). The isolation level that provides maximum protection from other executing application programs. When an application program executes with repeatable read protection, rows referenced by the program cannot be changed by other programs until the program reaches a commit point.

requester. The source of a request to a remote RDBMS, the system that requests the data. A requester is sometimes called an application requester (AR).

resource. The object of a lock or claim, which could be a table space, an index space, a data partition, an index partition, or a logical partition.

resource allocation. The part of plan allocation that deals specifically with the database resources.

resource control table (RCT). A construct of the CICS attachment facility, created by site-provided macro parameters, that defines authorization and access attributes for transactions or transaction groups.

resource limit facility (RLF). A portion of DB2 code that prevents dynamic manipulative SQL statements
from exceeding specified time limits. The resource limit facility is sometimes called the governor.

**resource limit specification table.** A site-defined table that specifies the limits to be enforced by the resource limit facility.

**result table.** The set of rows that are specified by a SELECT statement.

**retained lock.** A MODIFY lock that a DB2 subsystem was holding at the time of a subsystem failure. The lock is retained in the coupling facility lock structure across a DB2 failure.

**right outer join.** The result of a join operation that includes the matched rows of both tables that are being joined and preserves the unmatched rows of the second join operand. See also join.

**RLF.** Resource limit facility.

**RMID.** Resource manager identifier.

**RO.** Read-only access.

**rollback.** The process of restoring data changed by SQL statements to the state at its last commit point. All locks are freed. Contrast with commit.

**row.** The horizontal component of a table. A row consists of a sequence of values, one for each column of the table.

**ROWID.** Row identifier.

**row identifier (ROWID).** A value that uniquely identifies a row. This value is stored with the row and never changes.

**row lock.** A lock on a single row of data.

**RS.** Read stability.

**RTT.** Resource translation table.

**S**

**SCA.** Shared communications area.

**scalar function.** An SQL operation that produces a single value from another value and is expressed as a function name, followed by a list of arguments that are enclosed in parentheses. Contrast with column function.

**schema.** A logical grouping for user-defined functions, distinct types, triggers, and stored procedures. When an object of one of these types is created, it is assigned to one schema, which is determined by the name of the object. For example, the following statement creates a distinct type T in schema C:

```
CREATE DISTINCT TYPE C.T ...
```

**SDWA.** System diagnostic work area.

**search condition.** A criterion for selecting rows from a table. A search condition consists of one or more predicates.

**secondary group buffer pool.** For a duplexed group buffer pool, the structure that is used to back up changed pages that are written to the primary group buffer pool. No page registration or cross-invalidation occurs using the secondary group buffer pool. The OS/390 equivalent is new structure.

**section.** The segment of a plan or package that contains the executable structures for a single SQL statement. For most SQL statements, one section in the plan exists for each SQL statement in the source program. However, for cursor-related statements, the DECLARE, OPEN, FETCH, and CLOSE statements reference the same section because, they each refer to the SELECT statement that is named in the DECLARE CURSOR statement. SQL statements such as COMMIT, ROLLBACK, and some SET statements do not use a section.

**segmented table space.** A table space that is divided into equal-sized groups of pages called segments. Segments are assigned to tables so that rows of different tables are never stored in the same segment.

**sequential data set.** A non-DB2 data set whose records are organized on the basis of their successive physical positions, such as on magnetic tape. Several of the DB2 database utilities require sequential data sets.

**sequential prefetch.** A mechanism that triggers consecutive asynchronous I/O operations. Pages are fetched before they are required, and several pages are read with a single I/O operation.

**server.** A functional unit that provides services to one or more clients over a network. In the DB2 environment, a server is the target for a request from a remote RDBMS and is the RDBMS that provides the data. A server is sometimes also called an application server (AS).

**service request block.** A unit of work that is scheduled to execute in another address space.

**shared communications area (SCA).** A coupling facility list structure that a DB2 data sharing group uses for inter-DB2 communication.

**shared lock.** A lock that prevents concurrently executing application processes from changing data, but not from reading data. Contrast with exclusive lock.
sign-on. A request that is made on behalf of an individual CICS or IMS application process by an attachment facility to enable DB2 to verify that it is authorized to use DB2 resources.

simple page set. A nonpartitioned page set. A simple page set initially consists of a single data set (page set piece). If and when that data set is extended to 2 GB, another data set is created, and so on up to a total of 32 data sets. DB2 considers the data sets to be a single contiguous linear address space containing a maximum of 64 GB. Data is stored in the next available location within this address space without regard to any partitioning scheme.

simple table space. A table space that is neither partitioned nor segmented.

SMF. System management facility.

SMP/E. System Modification Program/Extended.

SNA. Systems Network Architecture.

SNA network. The part of a network that conforms to the formats and protocols of Systems Network Architecture (SNA).

sourced function. A function that is implemented by another built-in or user-defined function that is already known to the database manager. This function can be a scalar function or a column (aggregating) function; it returns a single value from a set of values (for example, MAX or AVG). Contrast with external function and built-in function.

SPUFI. SQL Processor Using File Input.

SQL. Structured Query Language.

SQL communication area (SQLCA). A structure that is used to provide an application program with information about the execution of its SQL statements.

SQL descriptor area (SQLDA). A structure that describes input variables, output variables, or the columns of a result table.

SQL escape character. The symbol that is used to enclose an SQL delimited identifier. This symbol is the double quotation mark ("). See also escape character.

SQL Processor Using File Input (SPUFI). SQL Processor Using File Input. A facility of the TSO attachment subcomponent that enables the DB2I user to execute SQL statements without embedding them in an application program.

SQL return code. Either SQLCODE or SQLSTATE.

SQLCA. SQL communication area.

SQLDA. SQL descriptor area.

SQL/DS. Structured Query Language/Data System. This product is now obsolete and has been replaced by DB2 for VSE & VM.

SRB. Service request block.

SSI. Subsystem interface (MVS).

SSM. Subsystem member.

stand-alone. An attribute of a program that means it is capable of executing separately from DB2, without using DB2 services.

# star join. A method of joining a dimension column of a fact table to the key column of the corresponding dimension table. See also join, dimension, and star schema.

# star schema. The combination of a fact table (which contains most of the data) and a number of dimension tables. See also star join, dimension, and dimension table.

statement string. For a dynamic SQL statement, the character string form of the statement.

static SQL. SQL statements, embedded within a program, that are prepared during the program preparation process (before the program is executed). After being prepared, the SQL statement does not change (although values of host variables that are specified by the statement might change).

storage group. A named set of DASD volumes on which DB2 data can be stored.

stored procedure. A user-written application program, that can be invoked through the use of the SQL CALL statement.

structure. A construct that uses MVS to map and manage storage on a coupling facility. See cache structure, list structure, or lock structure.

Structured Query Language (SQL). A standardized language for defining and manipulating data in a relational database.

subcomponent. A group of closely related DB2 modules that work together to provide a general function.

subpage. The unit into which a physical index page can be divided.
subquery. A SELECT statement within the WHERE or HAVING clause of another SQL statement; a nested SQL statement.

subselect. That form of a query that does not include ORDER BY clause, UPDATE clause, or UNION operators.

SVC dump. A dump that is issued when an MVS or a DB2 functional recovery routine detects an error.

sync point. See commit point.

synonym. In SQL, an alternative name for a table or view. Synonyms can only be used to refer to objects at the subsystem in which the synonym is defined.

Sysplex. See Parallel Sysplex.

Sysplex query parallelism. Parallel execution of a single query that is accomplished by using multiple tasks on more than one DB2 subsystem. See also query CP parallelism.

system administrator. The person at a computer installation who designs, controls, and manages the use of the computer system.

system agent. A work request that DB2 creates internally such as prefetch processing, deferred writes, and service tasks.

system conversation. The conversation that two DB2 subsystems must establish to process system messages before any distributed processing can begin.

system diagnostic work area (SDWA). The data that is recorded in a SYS1.LOGREC entry that describes a program or hardware error.

System Modification Program/Extended (SMP/E). A tool for making software changes in programming systems (such as DB2) and for controlling those changes.

Systems Network Architecture (SNA). The description of the logical structure, formats, protocols, and operational sequences for transmitting information through and controlling the configuration and operation of networks.

SYS1.DUMPxx data set. A data set that contains a system dump.

SYS1.LOGREC. A service aid that contains important information about program and hardware errors.

table. A named data object consisting of a specific number of columns and some number of unordered rows. See also base table or temporary table.

table check constraint. A user-defined constraint that specifies the values that specific columns of a base table can contain.

table space. A page set that is used to store the records in one or more tables.

table space set. A set of table spaces and partitions that should be recovered together for one of these reasons:

- Each of them contains a table that is a parent or descendent of a table in one of the others.
- The set contains a base table and associated auxiliary tables.

A table space set can contain both types of relationships.

task control block (TCB). A control block that is used to communicate information about tasks within an address space that are connected to DB2. An address space can support many task connections (as many as one per task), but only one address space connection. See also address space connection.

TCB. Task control block (MVS).

# temporary table. A table that holds temporary data; for example, temporary tables are useful for holding or sorting intermediate results from queries that contain a large number of rows. The two kinds of temporary table, which are created by different SQL statements, are the created temporary table and the declared temporary table. Contrast with result table. See also created temporary table and declared temporary table.

thread. The DB2 structure that describes an application’s connection, traces its progress, processes resource functions, and delimits its accessibility to DB2 resources and services. Most DB2 functions execute under a thread structure. See also allied thread and database access thread.

three-part name. The full name of a table, view, or alias. It consists of a location name, authorization ID, and an object name, separated by a period.

time. A three-part value that designates a time of day in hours, minutes, and seconds.

time duration. A decimal integer that represents a number of hours, minutes, and seconds.
Time-Sharing Option (TSO). An option in MVS that provides interactive time sharing from remote terminals.

timestamp. A seven-part value that consists of a date and time. The timestamp is expressed in years, months, days, hours, minutes, seconds, and microseconds.

to-do. A state of a unit of recovery that indicates that the unit of recovery’s changes to recoverable DB2 resources are indoubt and must either be applied to the DASD media or backed out, as determined by the commit coordinator.

trace. A DB2 facility that provides the ability to monitor and collect DB2 monitoring, auditing, performance, accounting, statistics, and serviceability (global) data.

transaction lock. A lock that is used to control concurrent execution of SQL statements.

TSO. Time-Sharing Option.

TSO attachment facility. A DB2 facility consisting of the DSN command processor and DB2I. Applications that are not written for the CICS or IMS environments can run under the TSO attachment facility.

type 1 indexes. Indexes that were created by a release of DB2 before DB2 Version 4 or that are specified as type 1 indexes in Version 4. Contrast with type 2 indexes. As of Version 6, type 1 indexes are no longer supported.

type 2 indexes. Indexes that are created on a release of DB2 after Version 5 or that are specified as type 2 indexes in Version 4 or Version 5.

U

UDF. User-defined function.

UDT. User-defined data type. In DB2 for OS/390, the term distinct type is used instead of user-defined function.

undo. A state of a unit of recovery that indicates that the changes that the unit of recovery made to recoverable DB2 resources must be backed out.

UNION. An SQL operation that combines the results of two select statements. UNION is often used to merge lists of values that are obtained from several tables.

unique index. An index which ensures that no identical key values are stored in a table.

unique constraint. An SQL rule that no two values in a primary key, or in the key of a unique index, can be the same.

unit of recovery. A recoverable sequence of operations within a single resource manager, such as an instance of DB2. Contrast with unit of work.

unit of work. A recoverable sequence of operations within an application process. At any time, an application process is a single unit of work, but the life of an application process can involve many units of work as a result of commit or rollback operations. In a multi-site update operation, a single unit of work can include several units of recovery. Contrast with unit of recovery.

unlock. The act of releasing an object or system resource that was previously locked and returning it to general availability within DB2.

URE. Unit of recovery element.

URID (unit of recovery ID). The LOGRBA of the first log record for a unit of recovery. The URID also appears in all subsequent log records for that unit of recovery.

user-defined data type (UDT). See distinct type.

user-defined function (UDF). A function that is defined to DB2 using the CREATE FUNCTION statement and that can be referenced thereafter in SQL statements. A user-defined function can be either an external function or a sourced function. Contrast with built-in function.

UT. Utility-only access.

V

value. The smallest unit of data that is manipulated in SQL.

variable. A data element that specifies a value that can be changed. A COBOL elementary data item is an example of a variable. Contrast with constant.

version. A member of a set of similar programs, DBRMs, packages, or LOBs.

A version of a program is the source code that is produced by precompiling the program. The program version is identified by the program name and a timestamp (consistency token).

A version of a DBRM is the DBRM that is produced by precompiling a program. The DBRM version is identified by the same program name and timestamp as a corresponding program version.

A version of a package is the result of binding a DBRM within a particular database system. The package version is identified by the same program name and consistency token as the DBRM.
A version of a LOB is a copy of a LOB value at a point in time. The version number for a LOB is stored in the auxiliary index entry for the LOB.

**view.** An alternative representation of data from one or more tables. A view can include all or some of the columns that are contained in tables on which it is defined.

**Virtual Storage Access Method (VSAM).** An access method for direct or sequential processing of fixed- and varying-length records on direct access devices. The records in a VSAM data set or file can be organized in logical sequence by a key field (key sequence), in the physical sequence in which they are written on the data set or file (entry-sequence), or by relative-record number.

**Virtual Telecommunications Access Method (VTAM).** An IBM licensed program that controls communication and the flow of data in an SNA network.

**VSAM.** Virtual storage access method.

**VTAM.** Virtual Telecommunication Access Method (MVS).

**W**

**warm start.** The normal DB2 restart process, which involves reading and processing log records so that data under the control of DB2 is consistent. Contrast with **cold start.**

**WLM application environment.** An MVS Workload Manager attribute that is associated with one or more stored procedures. The WLM application environment determines the address space in which a given DB2 stored procedure runs.

**write to operator (WTO).** An optional user-coded service that allows a message to be written to the system console operator informing the operator of errors and unusual system conditions that may need to be corrected.

**WTO.** Write to operator.

**WTOR.** Write to operator (WTO) with reply.

**X**

**XCF.** See cross-system coupling facility.

**XES.** See cross-system extended services.
Bibliography

DB2 Universal Database Server for OS/390 Version 6 Product Libraries:

DB2 Universal Database for OS/390
- DB2 Administration Guide, SC26-9003
- DB2 Application Programming and SQL Guide, SC26-9004
- DB2 Application Programming Guide and Reference for Java™, SC26-9018
- DB2 ODBC Guide and Reference, SC26-9005
- DB2 Command Reference, SC26-9006
- DB2 Data Sharing: Planning and Administration, SC26-9007
- DB2 Data Sharing Quick Reference Card, SX26-3843
- DB2 Diagnosis Guide and Reference, LY36-3736
- DB2 Diagnostic Quick Reference Card, LY36-3737
- DB2 Image, Audio, and Video Extenders Administration and Programming, SC26-9650
- DB2 Installation Guide, GC26-9008
- DB2 Licensed Program Specifications, GC26-9009
- DB2 Messages and Codes, GC26-9011
- DB2 Master Index, SC26-9010
- DB2 Reference for Remote DRDA Requesters and Servers, SC26-9012
- DB2 Reference Summary, SX26-3844
- DB2 Release Planning Guide, SC26-9013
- DB2 SQL Reference, SC26-9014
- DB2 Text Extender Administration and Programming, SC26-9651
- DB2 Utility Guide and Reference, SC26-9015
- DB2 What’s New? GC26-9017
- DB2 Program Directory, GI10-8182

DB2 Administration Tool
- DB2 Administration Tool for OS/390 User’s Guide, SC26-9847

DB2 Buffer Pool Tool
- DB2 Buffer Pool Tool for OS/390 User’s Guide and Reference, SC26-9306

DB2 DataPropagator
- DB2 Replication Guide and Reference, SC26-9642

Net.Data for OS/390

The following books are available at
# http://www.ibm.com/software/net.data/library.html:
- Net.Data Library: Administration and Programming Guide for OS/390
- Net.Data Library: Language Environment Interface Reference
- Net.Data Library: Messages and Codes
- Net.Data Library: Reference

DB2 PM for OS/390
- DB2 PM for OS/390 Batch User’s Guide, SC26-9167
- DB2 PM for OS/390 Command Reference, SC26-9166
- DB2 PM for OS/390 General Information, GC26-9172
- DB2 PM for OS/390 Installation and Customization, SC26-9171
- DB2 PM for OS/390 Messages, SC26-9169
- DB2 PM for OS/390 Online Monitor User’s Guide, SC26-9168
- DB2 PM for OS/390 Report Reference Volume 1, SC26-9164
- DB2 PM for OS/390 Report Reference Volume 2, SC26-9165
- DB2 PM for OS/390 Using the Workstation Online Monitor, SC26-9170
- DB2 PM for OS/390 Program Directory, GI10-8183

Query Management Facility
- Query Management Facility: Developing QMF Applications, SC26-9579
- Query Management Facility: Getting Started with QMF on Windows, SC26-9582
- Query Management Facility: Installing and Managing QMF on OS/390, GC26-9575
- Query Management Facility: Installing and Managing QMF on Windows, GC26-9583
- Query Management Facility: Introducing QMF, GC26-9576
- Query Management Facility: Messages and Codes, GC26-9580
- Query Management Facility: Reference, SC26-9577
- Query Management Facility: Using QMF, SC26-9578
Ada/370
- IBM Ada/370 Language Reference, SC09-1297
- IBM Ada/370 SQL Module Processor for DB2 Database Manager User’s Guide, SC09-1450

APL2
- APL2 Programming Guide, SH21-1072
- APL2 Programming: Language Reference, SH21-1061
- APL2 Programming: Using Structured Query Language (SQL), SH21-1057

AS/400
- DB2 for OS/400 SQL Programming, SC41-4611
- DB2 for OS/400 SQL Reference, SC41-4612

BASIC
- IBM BASIC/MVS Language Reference, GC26-4026
- IBM BASIC/MVS Programming Guide, SC26-4027

BookManager READ/MVS
- BookManager READ/MVS V1R3: Installation Planning & Customization, SC38-2035

C/370
- IBM SAA AD/Cycle C/370 Programming Guide, SC09-1841
- IBM SAA AD/Cycle C/370 User’s Guide, SC09-1763
- SAA CPI C Reference, SC09-1308

Character Data Representation Architecture
- Character Data Representation Architecture Overview, GC09-2207
- Character Data Representation Architecture Reference and Registry, SC09-2190

CICS/ESA
- CICS/ESA Application Programming Guide, SC33-1169
- CICS for MVS/ESA Application Programming Reference, SC33-1170
- CICS for MVS/ESA CICS-Supplied Transactions, SC33-1168
- CICS for MVS/ESA Customization Guide, SC33-1165
- CICS for MVS/ESA Data Areas, LY33-6083
- CICS for MVS/ESA Installation Guide, SC33-1163
- CICS for MVS/ESA Intercommunication Guide, SC33-1181
- CICS for MVS/ESA Messages and Codes, GC33-1177
- CICS/ESA Problem Determination Guide, SC33-1176
- CICS for MVS/ESA Resource Definition Guide, SC33-1166
- CICS for MVS/ESA System Definition Guide, SC33-1164
- CICS for MVS/ESA System Programming Reference, GC33-1171

CICS® Transaction Server for OS/390
- CICS Application Programming Guide, SC33-1687
- CICS DB2 Guide, SC33-1939
- CICS Resource Definition Guide, SC33-1684

CICS/MVS
- CICS/MVS Application Programmer’s Reference, SC33-0512
- CICS/MVS Facilities and Planning Guide, SC33-0504
- CICS/MVS Installation Guide, SC33-0506
- CICS/MVS Operations Guide, SC33-0510
- CICS/MVS Problem Determination Guide, SC33-0516
- CICS/MVS Resource Definition (Macro), SC33-0509
- CICS/MVS Resource Definition (Online), SC33-0508

IBM C/C++ for MVS/ESA
- IBM C/C++ for MVS/ESA Library Reference, SC09-1995

IBM COBOL
- IBM COBOL Language Reference, SC26-4769
- IBM COBOL for MVS & VM Programming Guide, SC26-4767

Conversion Guide
- IMS-DB and DB2 Migration and Coexistence Guide, GH21-1083

Cooperative Development Environment
- CoOperative Development Environment/370: Debug Tool, SC09-1623

Data Extract (DXT)
- Data Extract Version 2: General Information, GC26-4666
- Data Extract Version 2: Planning and Administration Guide, SC26-4631
DataPropagator NonRelational
- DataPropagator NonRelational MVS/ESA Administration Guide, SH19-5036
- DataPropagator NonRelational MVS/ESA Reference, SH19-5039

Data Facility Data Set Services
- Data Facility Data Set Services: User's Guide and Reference, SC26-4388

Database Design

DataHub
- IBM DataHub General Information, GC26-4874

DB2 Connect
- DB2 Connect Enterprise Edition for OS/2 and Windows NT: Quick Beginnings, GC09-2828
- DB2 Connect Personal Edition Quick Beginnings, GC09-2830
- DB2 Connect User's Guide, SC09-2838

DB2 Server for VSE & VM
- DB2 Server for VM: DBS Utility, SC09-2394
- DB2 Server for VSE: DBS Utility, SC09-2395

DB2 Universal Database (DB2 UDB)
- DB2 UDB Administration Guide Volume 1: Design and Implementation, SC09-2839
- DB2 UDB Administration Guide Volume 2: Performance, SC09-2840
- DB2 UDB Administrative API Reference, SC09-2841
- DB2 UDB Application Building Guide, SC09-2842
- DB2 UDB Application Development Guide, SC09-2845
- DB2 UDB Call Level Interface Guide and Reference, SC09-2843
- DB2 UDB SQL Getting Started, SC09-2856
- DB2 UDB SQL Reference Volume 1, SC09-2847
- DB2 UDB SQL Reference Volume 2, SC09-2848

Device Support Facilities

DFSMS/MVS
- DFSMS/MVS: Access Method Services for the Integrated Catalog, SC26-4906

DFSORT
- DFSORT Application Programming: Guide, SC33-4035

Distributed Relational Database
- Data Stream and OPA Reference, SC31-6806
- IBM SQL Reference, SC26-8416
- Open Group Technical Standard (the Open Group presently makes the following books available through its Web site at http://www.opengroup.org):
  - DRDA Volume 1: Distributed Relational Database Architecture (DRDA), ISBN 1-85912-295-7
  - DRDA Version 2 Volume 2: Formatted Data Object Content Architecture, available only on Web

Domain Name System
- DNS and BIND, Third Edition, Paul Albitz and Cricket Liu, O'Reilly, SR23-8771

Education
- 1999 IBM All-in-One Education and Training Catalog, GR23-8105

Enterprise System/9000 and Enterprise System/3090

Bibliography
High Level Assembler
- High Level Assembler for MVS and VM and VSE Language Reference, SC26-4940
- High Level Assembler for MVS and VM and VSE Programmer’s Guide, SC26-4941

Parallel Sysplex Library
- OS/390 Parallel Sysplex Application Migration, GC28-1863
- System/390 MVS Sysplex Hardware and Software Migration, GC28-1862
- OS/390 Parallel Sysplex Overview: An Introduction to Data Sharing and Parallelism, GC28-1860
- OS/390 Parallel Sysplex Systems Management, GC28-1861
- OS/390 Parallel Sysplex Test Report, GC28-1963
- System/390 9672/9674 System Overview, GA22-7148

ICSF/MVS
- ICSF/MVS General Information, GC23-0093

IMS/ESA
- IMS Batch Terminal Simulator General Information, GH20-5522
- IMS/ESA Administration Guide: System, SC26-8013
- IMS/ESA Administration Guide: Transaction Manager, SC26-8731
- IMS/ESA Application Programming: Database Manager, SC26-8727
- IMS/ESA Application Programming: Transaction Manager, SC26-8729
- IMS/ESA Customization Guide, SC26-8020
- IMS/ESA Installation Volume 1: Installation and Verification, SC26-8023
- IMS/ESA Installation Volume 2: System Definition and Tailoring, SC26-8024
- IMS/ESA Messages and Codes, SC26-8028
- IMS/ESA Operator’s Reference, SC26-8030
- IMS/ESA Utilities Reference: System, SC26-8035

ISPF
- ISPF V4 Dialog Developer’s Guide and Reference, SC34-4486
- ISPF V4 Messages and Codes, SC34-4450
- ISPF V4 Planning and Customizing, SC34-4443
- ISPF V4 User’s Guide, SC34-4484

Language Environment
- Debug Tool User’s Guide and Reference, SC09-2137

National Language Support
- IBM National Language Support Reference Volume 2, SE09-8002

NetView
- NetView Installation and Administration Guide, SC31-8043
- NetView User’s Guide, SC31-8056

ODBC

OS/390
- OS/390 C/C++ Programming Guide, SC09-2362
- OS/390 C/C++ Run-Time Library Reference, SC28-1863
- OS/390 C/C++ User’s Guide, SC09-2361
- OS/390 eNetwork Communications Server: IP Configuration, SC31-8513
- OS/390 Hardware Configuration Definition Planning, GC28-1750
- OS/390 Information Roadmap, GC28-1727
- OS/390 JES2 Initialization and Tuning Guide, SC28-1791
- OS/390 JES3 Initialization and Tuning Guide, SC28-1802
- OS/390 Language Environment for OS/390 & VM Customization, SC28-1941
- OS/390 Language Environment for OS/390 & VM Debugging Guide, SC28-1942
- OS/390 Language Environment for OS/390 & VM Programming Reference, SC28-1940
- OS/390 MVS Diagnosis: Procedures, LY28-1082
- OS/390 MVS Diagnosis: Reference, SY28-1084
- OS/390 MVS Diagnosis: Tools and Service Aids, LY28-1085
- OS/390 MVS Initialization and Tuning Guide, SC28-1751
- OS/390 MVS Initialization and Tuning Reference, SC28-1752
- OS/390 MVS Installation Exits, SC28-1753
- OS/390 MVS JCL Reference, GC28-1757
- OS/390 MVS JCL User’s Guide, GC28-1758
- OS/390 MVS Planning: Global Resource Serialization, GC28-1759
- OS/390 MVS Planning: Operations, GC28-1760
- OS/390 MVS Planning: Workload Management, GC28-1761
- OS/390 MVS Programming: Assembler Services Reference, GC28-1910
• OS/390 MVS Programming: Callable Services for High-Level Languages, GC28-1768
• OS/390 MVS Programming: Extended Addressability Guide, GC28-1769
• OS/390 MVS Programming: Sysplex Services Guide, GC28-1771
• OS/390 MVS Programming: Sysplex Services Reference, GC28-1772
• OS/390 MVS Programming: Workload Management Services, GC28-1773
• OS/390 MVS Routing and Descriptor Codes, GC28-1778
• OS/390 MVS Setting Up a Sysplex, GC28-1779
• OS/390 MVS System Codes, GC28-1780
• OS/390 MVS System Commands, GC28-1781
• OS/390 MVS System Messages Volume 1, GC28-1784
• OS/390 MVS System Messages Volume 2, GC28-1785
• OS/390 MVS System Messages Volume 3, GC28-1786
• OS/390 MVS System Messages Volume 4, GC28-1787
• OS/390 MVS System Messages Volume 5, GC28-1788
• OS/390 MVS Using the Subsystem Interface, GC28-1789
• OS/390 Security Server (RACF) Command Language Reference, SC28-1919
• OS/390 Security Server (RACF) Introduction, GC28-1912
• OS/390 Security Server (RACF) Macros and Interfaces, SK2T-6700 (OS/390 Collection Kit ), SK27-2180 (OS/390 Security Server Information Package )
• OS/390 SMP/E Reference, SC28-1806
• OS/390 SMP/E User’s Guide, SC28-1740
• OS/390 TSO/E CLISTS, SC28-1973
• OS/390 TSO/E Command Reference, SC28-1969
• OS/390 TSO/E Customization, SC28-1965
• OS/390 TSO/E Messages, GC28-1978
• OS/390 TSO/E Programming Services, SC28-1971
• OS/390 TSO/E REXX Reference, SC28-1975
• OS/390 DCE Administration Guide, SC28-1584
• OS/390 DCE Introduction, GC28-1581
• OS/390 DCE Messages and Codes, SC28-1591
• OS/390 UNIX System Services Command Reference, SC28-1892
• OS/390 UNIX System Services Messages and Codes, SC28-1908
• OS/390 UNIX System Services Planning, SC28-1890
• OS/390 UNIX System Services User’s Guide, SC28-1891
• OS/390 UNIX System Services Programming: Assembler Callable Services Reference, SC28-1899

PL/I for MVS & VM
• IBM PL/I MVS & VM Language Reference, SC26-3114
• IBM PL/I MVS & VM Programming Guide, SC26-3113

OS PL/I
• OS PL/I Programming Language Reference, SC26-4308
• OS PL/I Programming Guide, SC26-4307

Prolog
• IBM SAA AD/Cycle Prolog/MVS & VM Programmer’s Guide, SH19-6892

RAMAC
• IBM RAMAC Virtual Array, SG24-4951
• RAMAC Virtual Array: Implementing Peer-to-Peer Remote Copy, SG24-5338
• Enterprise Storage Server Introduction and Planning, GC26-7294

Remote Recovery Data Facility
• Remote Recovery Data Facility Program Description and Operations, LY37-3710

Storage Management
• DFSMS/MVS Storage Management Library: Implementing System-Managed Storage, SC26-3123
• MVS/ESA Storage Management Library: Leading a Storage Administration Group, SC26-3126
• MVS/ESA Storage Management Library: Managing Data, SC26-3124
• MVS/ESA Storage Management Library: Managing Storage Groups, SC26-3125
• MVS Storage Management Library: Storage Management Subsystem Migration Planning Guide, SC26-4659

System/370 and System/390
• ESA/370 Principles of Operation, SA22-7200
• ESA/390 Principles of Operation, SA22-7201
• System/390 MVS Sysplex Hardware and Software Migration, GC28-1210
System Network Architecture (SNA)
- SNA Formats, GA27-3136
- SNA LU 6.2 Peer Protocols Reference, SC31-6808
- SNA Transaction Programmer’s Reference Manual for LU Type 6.2, GC30-3084
- SNA/Management Services Alert Implementation Guide, GC31-6809

TCP/IP
- IBM TCP/IP for MVS: Customization & Administration Guide, SC31-7134
- IBM TCP/IP for MVS: Diagnosis Guide, LY43-0105
- IBM TCP/IP for MVS: Messages and Codes, SC31-7132
- IBM TCP/IP for MVS: Planning and Migration Guide, SC31-7189

VS COBOL II
- VS COBOL II Application Programming Guide for MVS and CMS, SC26-4045
- VS COBOL II Application Programming: Language Reference, GC26-4047

VS FORTRAN
- VS FORTRAN Version 2: Language and Library Reference, SC26-4221

VTAM
- Planning for NetView, NCP, and VTAM, SC31-8063
- VTAM for MVS/ESA Diagnosis, LY43-0069
- VTAM for MVS/ESA Messages and Codes, SC31-6546
- VTAM for MVS/ESA Network Implementation Guide, SC31-6548
- VTAM for MVS/ESA Operation, SC31-6549
- VTAM for MVS/ESA Programming, SC31-6550
- VTAM for MVS/ESA Programming for LU 6.2, SC31-6551
- VTAM for MVS/ESA Resource Definition Reference, SC31-6552
How to send your comments

Your feedback helps IBM to provide quality information. Please send any comments that you have about this book or other DB2 for OS/390 documentation. You can use any of the following methods to provide comments.

- Send your comments by e-mail to db2pubs@vnet.ibm.com and include the name of the product, the version number of the product, the number of the book. If you are commenting on specific text, please list the location of the text (for example, a chapter and section title, page number, or a help topic title).

- Send your comments from the Web. Visit the DB2 for OS/390 Web site at:
  
  http://www.ibm.com/software/db2os390

  The Web site has a feedback page that you can use to send comments.

- Complete the readers' comment form at the back of the book and return it by mail, by fax (800-426-7773 for the United States and Canada), or by giving it to an IBM representative.
Readers' Comments

DB2 Universal Database for OS/390
Messages and Codes
Version 6
Publication No. GC26-9011-02

How satisfied are you with the information in this book?

<table>
<thead>
<tr>
<th></th>
<th>Very Satisfied</th>
<th>Satisfied</th>
<th>Neutral</th>
<th>Dissatisfied</th>
<th>Very Dissatisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technically accurate</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Complete</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Easy to find</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Easy to understand</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Well organized</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Applicable to your tasks</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Grammatically correct and consistent</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Graphically well designed</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Overall satisfaction</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

Please tell us how we can improve this book:

May we contact you to discuss your comments? □ Yes □ No

Name

Address

Company or Organization

Phone No.