DB2 Version 9.1 for z/OS

Codes

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Contents

About this information

This information helps you to understand the codes that you could receive while working with DB2® Version 9.1 for z/OS® (DB2 for z/OS). The topics provide detailed descriptions of the codes that are issued by DB2, with explanations and user responses for the situations that are associated with these codes.

This information assumes that your DB2 subsystem is running in Version 9.1 new-function mode. Generally, new functions that are described, including changes to existing functions, statements, and limits, are available only in new-function mode. Two exceptions to this general statement are new and changed utilities and optimization enhancements, which are also available in conversion mode unless stated otherwise.

Throughout this information, "DB2" means "DB2 Version 9.1 for z/OS". Other DB2 products are given their complete names or abbreviations.

Who should read this information

DB2 Codes lists codes that are issued by DB2, with explanations and suggested responses. This information is intended for users and system programmers who might encounter DB2 messages and codes.

DB2 Utilities Suite

Important: In this version of DB2 for z/OS, the DB2 Utilities Suite is available as an optional product. You must separately order and purchase a license to such utilities, and discussion of those utility functions in this publication is not intended to otherwise imply that you have a license to them.

The DB2 Utilities Suite is designed to work with the DFSORT program, which you are licensed to use in support of the DB2 utilities even if you do not otherwise license DFSORT for general use. If your primary sort product is not DFSORT, consider the following informational APARs mandatory reading:
- II14047/II14213: USE OF DFSORT BY DB2 UTILITIES
- II13495: HOW DFSORT TAKES ADVANTAGE OF 64-BIT REAL ARCHITECTURE

These informational APARs are periodically updated.

> **Related information**
>
> DB2 utilities packaging (Utility Guide)

Terminology and citations

In this information, DB2 Version 9.1 for z/OS is referred to as "DB2 for z/OS." In cases where the context makes the meaning clear, DB2 for z/OS is referred to as "DB2." When this information refers to titles of DB2 for z/OS books, a short title is used. (For example, "See *DB2 SQL Reference*" is a citation to *IBM® DB2 Version 9.1 for z/OS SQL Reference*.)

When referring to a DB2 product other than DB2 for z/OS, this information uses the product's full name to avoid ambiguity.

The following terms are used as indicated:

DB2 Represents either the DB2 licensed program or a particular DB2 subsystem.

OMEGAMON®
Refers to any of the following products:
- IBM Tivoli® OMEGAMON XE for DB2 Performance Expert on z/OS
- IBM Tivoli OMEGAMON XE for DB2 Performance Monitor on z/OS
- IBM DB2 Performance Expert for Multiplatforms and Workgroups
- IBM DB2 Buffer Pool Analyzer for z/OS

C, C++, and C language
Represent the C or C++ programming language.

CICS® Represents CICS Transaction Server for z/OS.

IMS™ Represents the IMS Database Manager or IMS Transaction Manager.

MVS™ Represents the MVS element of the z/OS operating system, which is equivalent to the Base Control Program (BCP) component of the z/OS operating system.

RACF®
Represents the functions that are provided by the RACF component of the z/OS Security Server.

Accessibility features for DB2 Version 9.1 for z/OS

Accessibility features help a user who has a physical disability, such as restricted mobility or limited vision, to use information technology products successfully.

Accessibility features

The following list includes the major accessibility features in z/OS products, including DB2 Version 9.1 for z/OS. These features support:

- Keyboard-only operation.
- Interfaces that are commonly used by screen readers and screen magnifiers.
- Customization of display attributes such as color, contrast, and font size

Tip: The Information Management Software for z/OS Solutions Information Center (which includes information for DB2 Version 9.1 for z/OS) and its related publications are accessibility-enabled for the IBM Home Page Reader. You can operate all features using the keyboard instead of the mouse.

Keyboard navigation

You can access DB2 Version 9.1 for z/OS ISPF panel functions by using a keyboard or keyboard shortcut keys.

For information about navigating the DB2 Version 9.1 for z/OS ISPF panels using TSO/E or ISPF, refer to the *z/OS TSO/E Primer*, the *z/OS TSO/E User's Guide*, and the *z/OS ISPF User's Guide*. These guides describe how to navigate each interface, including the use of keyboard shortcuts or function keys (PF keys). Each guide includes the default settings for the PF keys and explains how to modify their functions.

Related accessibility information

Online documentation for DB2 Version 9.1 for z/OS is available in the Information Management Software for z/OS Solutions Information Center, which is available at the following Web site: http://publib.boulder.ibm.com/infocenter/dzichelp

IBM and accessibility

See the *IBM Accessibility Center* at http://www.ibm.com/able for more information about the commitment that IBM has to accessibility.

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 z/OS documentation. You can use the following methods to provide comments:

* Send your comments by e-mail to db2zinfo@us.ibm.com and include the name of the product, the version number of the product, and 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 or a help topic title).
* You can send comments from the Web. Visit the DB2 for z/OS - Technical Resources Web site at:

  http://www.ibm.com/support/docview.wss?&uid=swg27011656

  This Web site has an online reader comment form that you can use to send comments.
* You can also send comments by using the feedback link at the footer of each page in the Information Management Software for z/OS Solutions Information Center at http://publib.boulder.ibm.com/infocenter/db2zhelp.

How to interpret code numbers

DB2 issues SQL execution codes, reason codes, abend reason codes, and DB2 instrumentation facility interface reason codes to communicate about normal and error situations. The format of the code numbers can help you understand what the code applies to.

SQL return codes have the following format:

-418

sign   With the exception of the return code 000, SQL return codes are prefixed with either a + or - sign. The sign represents either success (+) or error (-). The unsigned code 000 indicates success.

number
    The numeric portion of an SQL return code is three to five digits long.

All DB2 reason codes, including subsystem termination reason codes, are four bytes long and have the following format:

00E50041

00   The first byte is always 00, which is the *high-order byte*.

E5   The second byte is the *hexadecimal identifier* (hex ID), which identifies the DB2 subcomponent. In this example, E5 identifies the DB2 agent services manager.

0041   The last two bytes are the *numeric identifier*, which is unique within the subcomponent.

The DB2 reason codes are grouped by hexadecimal identifier and listed in numeric order.

Subcomponent identifiers

The numbers that are assigned to messages and reason codes in DB2 are associated with certain DB2 subcomponents or functional areas.

The following table lists the DB2 subcomponents and functional areas and shows the identifiers associated with each one.

Table 1. Subcomponent identifiers used in messages and reason codes

Subcomponent or functional area	Associated identifier for messages	Associated identifier for reason codes
Call attachment facility	A	X'C1'
Buffer manager	B	X'C2'
TSO attachment facility	E	X'C5'
Message generator	F	X'C6'
Database descriptor manager	G	n/a
Precompiler, DSNH CLIST	H	X'C8'
Data manager	I	X'C9'
Recovery log manager	J	X'D1'
Distributed data facility	L	X'D3'
IMS attachment facility	M	X'D4'
XML manager	n/a	X'D5'
Data space manager	P	X'D7'
MQListener	Q	n/a
Recovery manager	R	X'D9'
Storage manager	S	X'E2'
Service controller, install	T	X'E3'
Utilities	U	X'E4'
Agent services manager	V	X'E5'
Instrumentation facility	W	X'E6'
Relational data system	X	X'E7'
Initialization procedures	Y	X'E8'
System parameter manager	Z	X'E9'
Service facilities	1	X'F1'
Subsystem support subcomponent	3	X'F3'
Group manager	7	X'F7'
Sample applications	8	X'F8'
General command processor	9	X'F9'

Messages with `DSNC` and `DSN2` identifiers and codes in the X'C3' range were previously used to display CICS messages. For information about CICS messages, see the information in the CICS Library.

How to find additional information about messages

When you are working with DB2, you might encounter messages issued by other IBM products, such as IMS, CICS, or z/OS. Information about messages issued by these and other IBM products is available in a variety of formats.

CICS Information centers for multiple versions of CICS are available as part of the CICS Library.

IMS IMS messages are available in the Information Management Software for z/OS Solutions Information Center.

IRLM Messages and codes related to the IRLM, which were previously part of *DB2 Codes* are now provided in IRLM Messages and Codes for IMS and DB2 for z/OS. IRLM messages have the prefix `dxr`.

z/OS Information for multiple versions of z/OS is available as part of the z/OS Internet Library.

Many IBM message references are also available from the IBM Publications Center and some IBM product messages, including the DB2 for z/OS messages, are enabled for the LookAt facility.

Part 1. SQL codes

When DB2 executes an SQL statement, it returns information about the statement execution. This information includes the SQL return code (SQLCODE) and the SQLSTATE, which indicate whether statement execution was successful.

An application program that contains executable SQL statements must do one of the following things:

- Declare SQLCODE and SQLSTATE (SQLCOD and SQLSTA in Fortran) as stand-alone host variables. If you specify the STDSQL(YES) precompiler or SQL statement coprocessor option, these host variables receive the return codes, and you should not include an SQLCA in your program.
- Provide a structure named SQLCA. The SQLCA includes the SQLCODE and SQLSTATE, in addition to other status information. You can provide an SQLCA by using the INCLUDE SQLCA statement. You can call the DSNTIAR sample subroutine from your application program to format the contents of the SQLCA, or you can retrieve fields from the SQLCA yourself.

See *SQL Reference* for the complete contents of the SQLCA. See *Application Programming and SQL Guide* for information on how to use an SQLCA in your application programs.

For more information about DSNTIAR, refer to Part 2 of *Application Programming and SQL Guide*.

In this section, the italicized phrases in the SQL return code message text corresponds to the tokens that are returned in the SQLERRMC field of the SQLCA. If DB2 returns several tokens, they appear sequentially in SQLERRMC in the order that they appear in the message text.

Attention: In some cases a token is not applicable or available for a specific instance of an error, and *N is returned instead.

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.

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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 D, "SQLSTATE values and common error codes," on page 851 for more information and a complete list of the possible values of SQLSTATE.

Chapter 1. Successful execution SQL codes

SQL return codes that are preceded by a plus sign (+) indicate that the SQL statement execution was successful.

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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 D of *SQL Reference*.

SQLSTATE: 00000 for unqualified successful execution

SQLSTATE: 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.

SQLSTATE: 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.

SQLSTATE: 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:

- No row met the search conditions specified in an UPDATE or DELETE statement.
- The result of a SELECT INTO statement was an empty table.
- The result of the subselect of an INSERT statement is empty.
- A FETCH statement was executed when the cursor was positioned after the last row of the result table.
- No available rows qualified for return when SKIP LOCKED DATA was specified with isolation level CS or RS.
- A FETCH statement that returns a rowset was issued, but there were not enough rows after the current cursor position to reposition the cursor on a full rowset. The cursor has been positioned on a partial rowset. If a target was specified, data was returned only for the number of rows that were actually fetched for the partial rowset. The number of rows that were returned is in field SQLERRD3 of the SQLCA.

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

This SQLCODE is also issued when LOB data cannot be returned. This situation can occur when an application is running with isolation level UR and another application has locked the LOB table space.

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

SQLSTATE: 02000

+110 **SQL UPDATE TO A DATA CAPTURE TABLE NOT SIGNALED TO ORIGINATING SUBSYSTEM**

Explanation: IMS DataPropagator exit routine issued an SQL data change 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

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change in the log. DB2 does not notify IMS DataPropagator's exit routine of the change, because doing so might cause the same change to be made again.

SQLSTATE: 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.

SQLSTATE: 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 operation 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.

SQLSTATE: 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 either of the following:

- A referential constraint
- A check constraint, when the CURRENT RULES special register is set to 'DB2'

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.

SQLSTATE: 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 2 of *SQL Reference* .

SQLSTATE: 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.

SQLSTATE: 01532

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

Explanation: For ALTER TABLE ALTER COLUMN, column *column-name* is not a column in table *table-name*.

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

SQLSTATE: 01533

SQLSTATE: 01537

| +206 | *column-name* IS NOT A COLUMN OF AN INSERTED TABLE, UPDATED TABLE, MERGED 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, or SELECT FROM 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.

- In the case of a MERGE statement or SELECT from MERGE statement, the specified column is not a column in the target-table. Also, it is not a column specified in the include-columns clause.

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.

SQLSTATE: 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.

| +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 2 of *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.

SQLSTATE: 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 2 of *SQL Reference* for information about defining an explanation table.

SQLSTATE: 01546

| +222 | HOLE DETECTED USING CURSOR *cursor-name* |

Explanation: A *delete hole* or an *update hole* has been detected while processing a FETCH for cursor *cursor-name*. With a SENSITIVE STATIC cursor, a delete hole occurs when DB2 tries to refetch a row from the database for a cursor and finds that the corresponding row of the underlying table has been deleted. An update hole occurs when DB2 tries to refetch a row from the database for a cursor and finds that the corresponding row of the underlying table no longer satisfies the search condition.

Chapter 1. Successful execution SQL codes **5**

cursor-name
> Name of the cursor used for the FETCH statement.

System action: The statement cannot be processed, and no data is fetched. The cursor is repositioned on the hole.

Programmer response: Correct the application program to handle this situation, or change isolation levels so the base row cannot be deleted during the cursor operation.

SQLSTATE: 02502

+231	**CURRENT POSITION OF CURSOR** *cursor-name* **IS NOT VALID FOR THE SPECIFIED FETCH ORIENTATION OF THE CURRENT ROW OR ROWSET**

Explanation: The cursor was not positioned on a row or rowset, and one of the following fetch orientations specified that the cursor was to be positioned relative to its current position:

- CURRENT or CURRENT ROWSET
- RELATIVE 0 or ROWSET STARTING AT RELATIVE 0

cursor-name
> Name of the cursor used for the FETCH statement.

System action: The statement cannot be processed. No data was fetched, and the cursor position is unchanged.

Programmer response: Correct the application program to establish a valid cursor position before issuing this FETCH statement.

SQLSTATE: 02000

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

Explanation: The value of the SQLN field of the SQLDA 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*.

Attention: 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.

SQLSTATE: 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 (*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*.

Attention: 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. Additionally, because there were enough SQLVAR entries for the *base* SQLVARs, DB2 has set the fields of the *base* SQLVAR entries. However, DB2 has not set any *extended* SQLVAR entries.

Programmer response: If there is no need for the additional information about the distinct type(s), then no action is required 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 SQLDA should be increased to *integer2* (after making sure that the SQLDA is large enough to support that amount) and the statement should be resubmitted.

SQLSTATE: 01594

+238	SQLDA INCLUDES *integer1* SQLVAR ENTRIES, BUT *integer2* SQLVAR ENTRIES ARE NEEDED FOR *integer3* COLUMNS BECAUSE AT LEAST ONE OF THE COLUMNS BEING DESCRIBED IS A LOB

Explanation: Given that at least one the columns being described is a LOB, space must 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. One or more of the columns being described may be a distinct type.

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*), and whether the columns include any distinct types:

- With USING BOTH, and one or more distinct types, 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*.

Important: 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.

SQLSTATE: 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.
- 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. :elq.

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).

SQLSTATE: 01005

+252	A NON-ATOMIC *statement* STATEMENT SUCCESSFULLY PROCESSED ALL REQUESTED ROWS, WITH ONE OR MORE WARNING CONDITIONS

Explanation: A non-atomic *statement* statement successfully processed multiple rows of data. However, one or more warning conditions occurred. Use GET DIAGNOSTICS to obtain information about the warning conditions that occurred.

System action: The statement was processed.

Programmer response: Analyze the warning conditions to determine whether the statement should be rolled back or not.

SQLSTATE: 01659

+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.

SQLSTATE: 01515

+331 **THE NULL VALUE HAS BEEN ASSIGNED TO A HOST VARIABLE OR PARAMETER BECAUSE THE STRING CANNOT BE CONVERTED FROM** *source-ccsid* **TO** *target-ccsid***. REASON** *reason-code***, POSITION** *position-number*

Explanation: A string had to be converted from *source-ccsid* to *target-ccsid* and an error occurred during the conversion. The *position-number*, if provided (non-zero), is the ordinality of the host variable or parameter in the SQLDA. See the description of SQLCODE -331 for further information including the meaning of the *reason-code*.

System action: The host variable is unchanged and its indicator variable is set to -2 to indicate that a null value is returned. Execution of the statement continues as if the conversion error had not occurred.

SQLSTATE: 01520

+335 **DB2 CONVERTED A HOST VARIABLE, PARAMETER, OR COLUMN NUMBER** *var-num var-name-or-num* **TO COLUMN NAME, HOST VARIABLE, OR EXPRESSION NUMBER** *col-name-or-num* **FROM** *from ccsid* **TO** *to-ccsid***, AND RESULTING IN SUBSTITUTION CHARACTERS.**

Explanation: A conversion error occurred during the conversion of a string to a different coded character set. One or more substitution characters have been placed in the string during the conversion process.

System action: DB2 processes the statement successfully.

Programmer response: This warning can occur in two situations:

- If trace for IFCID 136 or 168 is not active, DB2 processes the SQL statement, but used substitution characters instead one or more characters as a result of character conversion from *from ccsid* to *to-ccsid*. If substitution is acceptable, no action is necessary. If substitution is not acceptable, issue a ROLLBACK.

Ensure that data being provided to DB2 is convertible from *from ccsid* to *to-ccsid* without data loss.

- If trace for IFCID 136 or 168 is active, and the *to-ccsid* token is an EBCDIC CCSID, and system parameter UIFCIDS is OFF, then this warning is caused by the conversion to EBCDIC CCSID for IFCID trace record. Use GET DIAGNOSTICS to determine if the original SQL string had any other warnings associated with it. If GET DIAGNOSTICS returns no other warnings, no action is required.

SQLSTATE: 01517

+347 **THE RECURSIVE COMMON TABLE EXPRESSION** *name* **MAY CONTAIN AN INFINITE LOOP**

Explanation: The recursive common table expression called *name* may not complete. This warning is based on not finding specific syntax as part of the iterative portion of the recursive common table expression. The expected syntax includes:

- incrementing an INTEGER column in the iterative select list by 1.
- a predicate in the where clause of the iterative portion of the form "counter_col < constant" or "counter_col < :hostvar".

The absence of this syntax in the recursive common table expression may result in an infinite loop. The data or some other characteristic of the recursive common table expression may allow the successful completion of the statement anyway.

System action: The statement cannot be executed.

Programmer response: To prevent an infinite loop, include the expected syntax as described.

SQLSTATE: 01605

+354 **A ROWSET FETCH STATEMENT MAY HAVE RETURNED ONE OR MORE ROWS OF DATA. HOWEVER, ONE OR MORE WARNING CONDITIONS WERE ALSO ENCOUNTERED. USE THE GET DIAGNOSTICS STATEMENT FOR MORE INFORMATION REGARDING THE CONDITIONS THAT WERE ENCOUNTERED**

Explanation: A rowset FETCH statement encountered one or more warning conditions. Use the GET DIAGNOSTICS statement to obtain information about the conditions that occurred, and to determine if data was returned. It is possible that one or more rows of data were returned. If the row information that was returned for the row that encountered the condition is incomplete, do not use the data for the row that encountered the condition, such as displaying or printing the data.

System action: DB2 processed the statement successfully, but with a warning that the fetching of some rows might have encountered warnings.

Programmer response: Analyze the conditions to determine whether follow-up actions are needed. The GET DIAGNOSTICS statement can be used to determine which additional actions might be necessary.

Attention: It is also possible that an end of data condition was detected. SQLERRD3 and GET DIAGNOSTICS can be used to determine if all of the requested rows were fetched or if a partial rowset was returned.

SQLSTATE: 01668

+361 **COMMAND WAS SUCCESSFUL BUT RESULTED IN THE FOLLOWING:** *msg-token*

Explanation: During the processing of a command such as a BIND PACKAGE or DROP or FREE PACKAGE, a condition occurred, as specified by *msg-token*, and the command needs to be examined.

System action: The request was successful.

User response: Evaluate the information contained in *msg-token* to determine if the results were as expected.

SQLSTATE: 0168B

+364 **DECFLOAT EXCEPTION** *exception-type* **HAS OCCURRED DURING** *operation-type* **OPERATION, POSITION** *position-number*

Explanation: The exception error *exception-type* occurred while performing an ADDITION, SUBTRACTION, MULTIPLICATION, DIVISION, NEGATION, or BUILT-IN FUNCTION operation on a field whose data type is DECFLOAT. The error occurred while processing an arithmetic expression. If the error occurred in the SELECT list of an outer SELECT statement, position in the select list is denoted by *position-number*. If not, position number is 0. The possible exception types are UNDERFLOW, OVERFLOW, INEXACT, INVALID OPERATION, DIVISION BY ZERO, or SUBNORMAL. 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.

Any of the exceptions or overflows can occur during the processing of a built-in function. If *operation-type* is FUNCTION, 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*, *operation-type*, and *position-number* might or might not be returned in SQLCA, depending upon when the error was detected.

System action: The resulting data proceeds according to IEEE 754r rules. Execution of the statement continues. 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 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 that the error occurred. See the explanation of SQLCODE -405 for allowed ranges of numeric data types.

SQLSTATE: 0168C if INEXACT

0168D if INVALID OPERATION

0168E if UNDERFLOW,OVERFLOW

0168F if DIVISION BY ZERO

0168G if SUBNORMAL

+385 **ASSIGNMENT TO AN SQLSTATE OR SQLCODE VARIABLE IN AN SQL ROUTINE** *routine-name* **MAY BE OVERWRITTEN AND DOES NOT ACTIVATE ANY HANDLER**

Explanation: SQL routine *routine-name* was created, but it contains an assignment statement that specifies the SQLCODE or SQLSTATE variable as the target.

Assignment to an SQLSTATE or SQLCODE variable in an SQL routine only changes the value in the variable, and does not activate any handler. The SQLSTATE and SQLCODE variables are assigned values by processing of SQL statements in the SQL routine. Therefore, any value assigned might be over-written as a result of SQL statement processing.

System action: The routine definition is processed successfully.

User response: No recovery is necessary. If the intent was to signal an error or warning, specify the SIGNAL or RESIGNAL statement instead of the assignment.

To prevent the warning, remove any assignments to the SQLSTATE or SQLCODE special variables.

SQLSTATE: 01643

+394 **ALL USER SPECIFIED OPTIMIZATION HINTS USED DURING ACCESS PATH SELECTION**

Explanation: All user specified optimization hints that were found for the statement being optimized are used.

System action: Processing continues normally.

Programmer response: Ensure that the access path is correct and produces the correct results. Refer to *Administration Guide* for more information on

OPTHINT, including a list of what fields are used as hints to the DB2 Optimizer

SQLSTATE: 01629

+395   **A USER SPECIFIED OPTIMIZATION HINT IS INVALID (REASON CODE =** *reason-code***)**

Explanation: DB2 detected that one or more optimization hints provided for this statement are invalid. A *reason-code* in the following table can help identify why the hint is invalid:

reason-code
Description

2	TABNO is invalid.
3	TNAME is not specified.
4	TNAME is ambiguous.
5	TABNO doesn't agree with TNAME.
6	QBLOCKNO doesn't agree with TNAME.
7	PAGE_RANGE is invalid.
8	PREFETCH is invalid.
9	METHOD is invalid.
10	SORTN_JOIN is invalid.
11	SORTC_JOIN is invalid.
12	ACCESSTYPE is invalid.
13	ACCESSCREATOR or ACCESSNAME is invalid.
15	Specified index cannot be used as requested.
16	Multi-index access cannot be done.
17	Invalid ACCESSTYPE combination.
18	METHOD specified for first table accessed.
19	Nested loop join cannot be done as requested.
20	Merge join cannot be done as requested.
21	Hybrid join cannot be done as requested.
22	PARALLELISM_MODE requested cannot be done.
23	PARALLELISM_MODE is invalid.
24	ACCESS_DEGREE is invalid.
25	JOIN_DEGREE is invalid.
26	A table is missing.
27	A table is redundant because TABNO is duplicated in the same query block.
28	PRIMARY_ACCESSTYPE is invalid.
29	ACCESS_PGROUP_ID is not specified.
30	JOIN_PGROUP_ID is not specified.
31	PARALLELISM_MODE is not specified.
32	CREATOR or TNAME is invalid.
33	Join sequence is incorrect.
34	WHEN_OPTIIMZE is invalid or inconsistent.
35	ACCESSTYPE 'V' is invalid for the table.
36	Number of dimensions joined before star join fact table exceeds maximum number of dimensions that can be joined by fact table index.
37	Only nested loop join is allowed on fact table when join type of the fact table is 'SJ'.
38	Join sequence specified before the fact table does not match the sequence allowed by fact table index.
39	Invalid plan hint values are specified.
40	Multiple index access cannot be performed with the indexes specified.
41	Duplicate hint input records found for the same table.
99	Unexpected error.

Only one reason-code is returned even if the hint contains multiple problems.

System action: The invalid hint is ignored and DB2 determines the access path without that hint. If other hints are supplied for the statement, DB2 might use those hints, if they are valid.

Programmer response: Examine the EXPLAIN output to determine which hints were used by DB2, and which hints were not used. If needed, correct the problem with the hints that were not used, or disable their use as hints to the optimizer. Refer to *Administration Guide* for more information on OPTHINT, including a list of what fields are used as hints to the DB2 Optimizer

SQLSTATE: 01628

+402   **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.

SQLSTATE: 01521

+403   **THE 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.

SQLSTATE: 01522

+434   *clause* **IS A DEPRECATED CLAUSE**

Explanation: The use of *clause* is accepted for now, but continued use of it is not recommended. However, for native SQL procedures, *clause* is not supported. See the SQL Reference for a list of options that are supported for native SQL procedures. SQLCODE -4705 might be issued instead if the situation occurs with a BIND COPY command that is used to deploy a version of a native SQL procedure that uses a deprecated option,and a package already exists by that name at the server.

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

System action: Processing continues and the clause is ignored.

User response: No change is required for the current release. However, you should change your SQL statement and remove this clause to prepare for releases when this clause is no longer accepted.

To prevent the warning, remove the deprecated clause from the statement.

SQLSTATE: 01608

+438   **APPLICATION RAISED WARNING WITH DIAGNOSTIC TEXT:** *text*

Explanation: This warning occurred as a result of the SIGNAL or RESIGNAL statement.

text   Diagnostic text provided by the SIGNAL or RESIGNAL statement.

System action: The statement was processed, but a warning was encountered.

Programmer response: Use the application-provided diagnostic text, if provided, to determine the cause of the warning.

SQLSTATE: Defined by the application

+440   **NO** *routine-type* **BY THE NAME** *routine-name* **HAVING COMPATIBLE ARGUMENTS WAS FOUND**

Explanation: This warning 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. Several reasons are present for this warning:

- *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 SQL 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.

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: Fix the problem and retry. Change the SQL statement, add new routines, or change the user's SQL path.

SQLSTATE: 01681

+445   **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.

SQLSTATE: 01004

+462   **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.

SQLSTATE: 01Hxx

+464 **PROCEDURE** *proc* **RETURNED** *num* **QUERY RESULT SETS, WHICH EXCEEDS THE DEFINED LIMIT** *integer*

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

SQLSTATE: 0100E

+466 **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'.

SQLSTATE: 0100C

+494 **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.

SQLSTATE: 01614

+495 **ESTIMATED PROCESSOR COST OF** *estimate-amount1* **PROCESSOR SECONDS (***estimate-amount2* **SERVICE UNITS) IN COST CATEGORY** *cost-category* **EXCEEDS A RESOURCE LIMIT WARNING THRESHOLD OF** *limit- amount* **SERVICE UNITS**

Explanation: The prepare of a dynamic INSERT, UPDATE, MERGE, DELETE, or SELECT SQL statement resulted in a cost estimate that exceeded the warning threshold value specified in the resource limit specification table (RLST). This warning is also issued if DB2's cost category value was "B", and the default action specified in the RLF_CATEGORY_B column in the RLST is to issue a warning.

estimate_amount1
 The cost estimate (in processor seconds) if the prepared INSERT, UPDATE, MERGE, DELETE, or SELECT statement were to be executed.

estimate_amount2
 The cost estimate (in service units) if the prepared INSERT, UPDATE, MERGE, 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 warning threshold (in service units) specified in the RLFASUWARN column of the RLST. If you entered any negative number for the RLFASUWARN column, the value for *limit-amount* defaults to zero.

System action: The prepare of the dynamic INSERT, UPDATE, MERGE, DELETE, or SELECT statement was successful. An SQLCODE -905 might be issued if the execution of the prepared statement exceeds the ASUTIME value specified in the RLST.

User response: If the warning is caused by an SQL statement that is consuming too much processor resource, attempt to rewrite the statement to perform more efficiently. Another option is to ask the administrator to increase the warning threshold value in the RLST.

Programmer response: Ensure that there is application logic to handle the warning to either allow the statement to execute or to stop the statement from being executed. 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 when the statement is executed, or for INSERT, UPDATE, MERGE, or DELETE statements that triggers are defined on the changed table. Check the DSN_STATEMNT_TABLE or the IFCID 22 record for this statement to find the reasons this SQL statement has been put in cost category "B".

SQLSTATE: 01616

+535   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.

SQLSTATE: 01591

+541   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 or PRIMARY KEY clause. In either case, the duplicate clause is ignored.

name is either the foreign key name or the unique constraint name.

System action: DB2 continues processing.

Programmer response: If the duplication is an error, correct the statement and execute it again.

SQLSTATE: 01543

+551   *auth-id* DOES NOT HAVE THE PRIVILEGE TO PERFORM OPERATION *operation* **ON OBJECT** *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, or if the object is a read-only view (for UPDATE, INSERT, or MERGE). Additionally, the error may occur if *auth-id* is trying to create a table or view with a schema qualifier that is a value other than *auth-id*. You may create a table or view with a schema qualifier other than *auth-id* other than your own authorization ID if your authorization ID is SYSADM, DBADM, or DBCTRL.

If you are using a trusted context, the token *auth-id*

might return a role instead of an authorization ID. A role is returned if a role was in effect and the authorization checking is performed against the role, rather than the authorization ID of the session, when the condition was encountered. Otherwise an authorization ID is returned. A role is returned in the following format as a single token:

• ROLE: *role-name*

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, DROP PRIMARY KEY, or DROP UNIQUE 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 schema qualifier other than the authorization ID.

SQLSTATE: 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.

If you are using a trusted context, the token *auth-id* might return a role instead of an authorization ID. A role is returned if a role was in effect and the authorization checking is performed against the role, rather than the authorization ID of the session, when the condition was encountered. Otherwise an authorization ID is returned. A role is returned in the following format as a single token:

ROLE: *role-name*

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.

SQLSTATE: 01542

+558   THE WITH GRANT OPTION IS
            IGNORED

Explanation: The WITH GRANT option was used where it is not valid. It cannot be used in the following cases:

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

System action: The offending privileges 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.

SQLSTATE: 01516

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

Explanation: A GRANT statement was specified with either an ALL or ALL PRIVILEGES keyword. ALL and ALL PRIVILEGES imply the granting of ALTER, INDEX, REFERENCES, and TRIGGER privileges, and these privileges 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*.

SQLSTATE: 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.

SQLSTATE: 01560

+585   THE COLLECTION *collection-id*
            APPEARS MORE THAN ONCE WHEN
            SETTING THE *special-register* SPECIAL
            REGISTER

Explanation: The SET statement for special register *special-register* includes *collection-id* more than once.

System action: Duplicates are removed from the list, and the first occurrence of *collection-id* is used. The statement is executed.

Programmer response: Verify the list that contains the

duplicate. If the error is only in entering a *collection-id* incorrectly that happens to duplicate another entry, enter the *collection-id* correctly and reissue the statement. If the entry is intended to be a duplicate, no action is required.

SQLSTATE: 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.

SQLSTATE: 01596

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

Explanation: As the result of a CREATE or ALTER action, the specified object has been placed in a pending status.

object-name
        The name of the object.

utility-name
        The name of the utility.

The reason for this error depends on the *utility-name* value and the object type.

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 in REBUILD PENDING status because ALTER TABLE ALTER COLUMN SET DATA TYPE increased a VARCHAR length column which is part of an index while in conversion mode.

    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 response for this error depends on the *utility-name* value and the object type.

REBUILD pending for an index
Use the REBUILD INDEX utility to rebuild the index and remove the REBUILD pending status.

REORG pending for 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.

REORG pending for a table space
Run the REORG utility on the table space.

SQLSTATE: 01566

+645 **WHERE NOT NULL IS IGNORED BECAUSE THE INDEX KEY CANNOT CONTAIN NULL VALUES OR THE INDEX IS AN XML INDEX**

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, or, the index is an XML index.

System action: The option is ignored; processing continues.

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

SQLSTATE: 01528

+650 **THE TABLE BEING CREATED OR ALTERED CANNOT BECOME A DEPENDENT TABLE**

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.

SQLSTATE: 01538

+653 **TABLE** *table-name* **IN PARTITIONED TABLESPACE** *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: 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.

SQLSTATE: 01551

+655 **STOGROUP** *stogroup_name* **HAS BOTH SPECIFIC AND NON-SPECIFIC VOLUME IDS. IT WILL NOT BE ALLOWED IN FUTURE RELEASES**

Explanation: The CREATE or 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.

SQLSTATE: 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.

SQLSTATE: 01600

+664 THE INTERNAL LENGTH OF THE LIMIT-KEY FIELDS SPECIFIED IN THE PARTITION CLAUSE OF THE *statement-name* STATEMENT EXCEEDS THE EXISTING INTERNAL LIMIT KEY LENGTH STORED IN CATALOG TABLE *table-name*

Explanation: The sum of the internal lengths of the limit keys specified in the PARTITION clause of the ALTER INDEX or ALTER TABLE statement exceeds the existing internal limit key length stored in catalog table SYSIBM.SYSINDEXPART or SYSIBM.SYSTABLEPART. The limit key was truncated to the existing internal limit key length to ensure the new limit key value has the same internal length as the other partitions.

System action: The specified index or table was altered but the limit key was truncated to be the existing internal limit key length.

SQLSTATE: 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.

SQLSTATE: 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.

SQLSTATE: 01527

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

Explanation: The exception error *exception-type*

occurred while performing one of the following operations on a field that has a *data-type* of DECIMAL, FLOAT, SMALLINT, or INTEGER:

- ADDITION
- SUBTRACTION
- MULTIPLICATION
- DIVISION
- NEGATION
- BUILT-IN FUNCTION

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:

DECIMAL OVERFLOW
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.

DIVIDE EXCEPTION
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, except when the data type is DECFLOAT.

EXPONENT OVERFLOW
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.

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

INVALID OPERATION

OUT OF RANGE
An error might occur during while processing an input, intermediate, or final value if the value of a parameter is out of range.

OVERFLOW
An overflow can occur during the processing of a built-in function. If the *operation-type* is FUNCTION, then the error occurred while processing an input, intermediate, or final value.

SUBNORMAL

UNDERFLOW
An underflow can occur during the processing of a built-in function. If the *operation-type* is FUNCTION, then the error occurred while processing an input, intermediate, or final value.

ZERO DIVIDE

The data type displayed in the message might indicate the data type of the temporary internal copy of the data. This might differ from the actual column or literal data type due to conversions by DB2.

Attention: Parts of *exception-type*, *data-type*, *operation-type*, and *position-number* might or might 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 non-error 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.

SQLSTATE: 01519

+806   **BIND ISOLATION LEVEL RR CONFLICTS WITH TABLESPACE LOCKSIZE PAGE OR LOCKSIZE ROW AND LOCKMAX 0**

Explanation: The specification of isolation level RR is incompatible with the LOCKSIZE PAGE or LOCKSIZE ROW and LOCKMAX 0 specification for a table space accessed by the application. Table space locking is used to protect the integrity of the application.

System action: A valid package/plan is created if no errors are detected. Table space locking is used. RR isolation level is preserved.

Programmer response: If you do not want table space locking, use isolation level UR, CS, or RS.

SQLSTATE: 01553

+807   **THE RESULT OF DECIMAL MULTIPLICATION MAY CAUSE OVERFLOW**

Explanation: An arithmetic expression contains a decimal multiplication that may cause an overflow condition when the statement is executed. The problem may be corrected by restructuring the arithmetic expression so that decimal multiplication precedes decimal division or by changing the precision and scale of the operands in the arithmetic expression. Refer to chapter 2 of *SQL Reference* for the precision and scale of the decimal multiplication and division results.

System action: A valid package will be created if no errors are detected.

SQLSTATE: 01554

+863   **THE CONNECTION WAS SUCCESSFUL BUT ONLY SBCS WILL BE SUPPORTED**

Explanation: The target AS supports only the DB2 SBCS CCSID. The DB2 Mixed CCSID or GRAPHIC CCSID or both are not supported by the target AS. DB2 character data sent to the target AS must be restricted to SBCS.

System action: The CONNECT statement is successful. The release level of the target AS has been placed into the SQLERRP field of the SQLCA (see *SQL Reference* for the CONNECT statement).

Programmer response: Do not execute any SQL statements which pass either mixed data or graphic data as input host variables.

SQLSTATE: 01539

+883   **ROLLBACK TO SAVEPOINT OCCURRED WHEN THERE WERE OPERATIONS THAT CANNOT BE UNDONE, OR AN OPERATION THAT CANNOT BE UNDONE OCCURRED WHEN THERE WAS A SAVEPOINT OUTSTANDING**

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 processed.

Programmer response: Verify that this is what you meant.

SQLSTATE: 01640

+20002   **THE *clause* SPECIFICATION IS IGNORED FOR OBJECT *object-name***

Explanation: This message is issued in response to a *clause* specification that was ignored on a CREATE or ALTER statement:

• GBPCACHE: The GBPCACHE clause specified conflicts with the group buffer pool specification GBPCACHE NO.

- PADDED: The PADDED clause was specified on a CREATE or ALTER of index *object-name* that does not have any varying-length character or graphic columns in the index key. The PADDED attribute does not apply in this case and is ignored.

- NOT PADDED: The NOT PADDED clause was specified on a CREATE or ALTER of index *object-name* that does not have any varying-length character or graphic columns in the index key. The NOT PADDED attribute does not apply in this case and is ignored.

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. For index padding, no action is necessary as the PADDED or NOT PADDED clause was ignored.

To stop receiving this message, remove the PADDED or NOT PADDED clause from the CREATE or ALTER index statement.

SQLSTATE: 01624

+20007   USE OF OPTIMIZATION HINTS IS DISALLOWED BY A DB2 SUBSYSTEM PARAMETER. THE SPECIAL REGISTER 'OPTIMIZATION HINT' IS SET TO AN EMPTY STRING.

Explanation: DB2 is not enabled to use optimization hints. The special register OPTIMIZATION HINT is set to an empty string.

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: Enable the use of OPTIMIZATION HINT by changing the value of OPTIMIZATION HINTS on the DB2 Installation panel DSNTIP8.

If, after further consideration, you do not want to use an OPTIMIZATION HINT, use the SET CURRENT OPTIMIZATION HINT statement to disable the use of optimization hints.

Specify an empty string, or a string of blanks, on a SET CURRENT OPTIMIZATION HINT statement to cause DB2 to use normal optimization techniques and ignore optimization hints.

SQLSTATE: 01602

+20122   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 INDEX statement on a declared temporary table

- a CREATE LOB TABLESPACE statement

- a CREATE TABLESPACE statement that included the VCAT clause

- a CREATE INDEX statement for a table that has a defined clone

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

SQLSTATE: 01644

+20141   TRUNCATION OF VALUE WITH LENGTH *length* OCCURRED FOR *hv-or-parm-number*

Explanation: A value that was assigned to a host variable or parameter was truncated. However, the length of the value that was truncated is too large to be returned in the indicator variable. This situation can occur when truncation occurs on assignment of:

- a value to a parameter of a remote stored procedure if the value being truncated is greater than 127 bytes. In this case, the indicator variable will contain a value of 127.

- a LOB value to a host variable if the value being truncated is greater than 32K bytes. In this case, the indicator variable will contain a value of 32K.

In these cases, the actual length of the truncated value cannot be returned to the application that uses the indicator variable. The actual length of the value is returned as message token *length*.

System action: The assignment was made, but the data was truncated.

Programmer response: Change the declaration of *hv-or-parm-number* to avoid truncation.

SQLSTATE: 01004

+20187   ROLLBACK TO SAVEPOINT CAUSED A NOT LOGGED TABLE SPACE TO BE PLACED IN THE LPL

Explanation: An application issued a ROLLBACK, but uncommitted changes existed for a table space defined with the NOT LOGGED logging attribute. DB2 cannot undo changes made to not logged table spaces because no log records were written due to the logging attribute of the table space. The table space is placed in the LPL so that other concurrently running agents are not able to see the data that cannot be rolled back. The table

space is also marked recover pending because the table space has been modified.

System action: The ROLLBACK TO SAVEPOINT was performed, however changes that were made to not logged table spaces have not been undone.

Programmer response: Avoid making changes to a not logged table space within the span of a savepoint to which you intend to rollback.

To remove a table space from the LPL and reset recover pending, use one of the following options:

- REFRESH TABLE to repopulate a Materialized Query Table, but only if the Materialized Query Table is alone in its table space. If the table, including Materialized Query Tables, is not alone in its table space, a utility must be used to reset the table space and remove it from recover pending.
- RECOVER utility, to recover either to currency or to a prior image copy
- LOAD REPLACE utility or LOAD REPLACE PART utility:
  - With an input dataset to empty the table space and repopulate the table
  - Without an input dataset to empty the table space to prepare for one or more insert operations to repopulate the table
- Drop and recreate the table space and repopulate the table.
- DELETE without a WHERE clause to empty the table. When the table space is segmented or universal, the table is alone in its table space and the table does not have a VALIDPROC, referential constraints, delete Triggers, or a SECURITY LABEL column (or has this column, but multilevel security is not in effect).
- TRUNCATE TABLE to empty the table. When the table space is segmented or universal, the table is alone in its table space and the table does not have a VALIDPROC, referential constraints, or a SECURITY LABEL column (or has this column, but multilevel security with row level granularity is not in effect).

Important: If the table, materialized query table or not, is not alone in its table space, a utility must be used to reset the table space and remove it from recover pending.

SQLSTATE: 01656

+20237   FETCH PRIOR ROWSET FOR CURSOR *cursor-name* **RETURNED A PARTIAL ROWSET**

Explanation: A FETCH PRIOR ROWSET statement was issued, but there were not enough rows prior to the current cursor position to reposition the cursor on a full rowset. The cursor has been positioned on a partial rowset. If a target was specified, then data has only been returned for the number of rows that were actually fetched for the partial rowset.

System action: The cursor is positioned on a partial rowset.

Programmer response: Analyze the situation to determine if anything should be rolled back.

SQLSTATE: 02504

+20245   NOT PADDED CLAUSE IS IGNORED FOR INDEXES CREATED ON AUXILIARY TABLES

Explanation: The NOT PADDED clause is ignored on the CREATE INDEX statement because auxiliary indexes are always PADDED.

System action: The option is ignored; processing continues.

Programmer response: Remove the NOT PADDED clause to avoid this warning.

SQLSTATE: 01663

+20270   OPTION NOT SPECIFIED FOLLOWING ALTER PARTITION CLAUSE

Explanation: An ALTER INDEX statement, which included the ALTER PARTITION clause, did not contain an option following the ALTER PARTITION keywords.

System action: The SQL statement is processed.

Programmer response: Specify a partition option after the ALTER PARTITION keywords to avoid this warning in the future. For an ALTER INDEX statement, if *partition-element* is specified, specify either the ENDING clause of:

- *partition-element*
- *using-block*
- *free-block*
- *gbcaches-block*

SQLSTATE: 01664

+20271   THE NAME AT ORDINAL POSITION *position-number* **IN THE STATEMENT, WITH NAME** *column-name***, MAY BE TRUNCATED.**

Explanation: At least one column name in the described statement might be truncated. The column name was either too long, or became too long after code page conversion.

position-number
      The ordinal position number of the name that might have been truncated. For the describe

output of a prepared query, the ordinal position is relative to the select list column of the query.

column-name
> The name that was truncated.

The column name that is stored in the catalog will not be truncated, but the length of the column name is limited when using the SQLDA structure.

System action: Processing continues.

User response: If the exact name is significant, do one of the following:

- For the name of a result column that is specified in an AS clause, change the name in the AS clause so that the result column has a shorter name.
- For the name of a column in a table or view, drop and re-create the table or view so that the column has a shorter name, or provide a shorter name for the result column in the query with an AS clause.
- For the name of a column in a table, use the ALTER TABLE statement to rename the column so that it has a shorter name.

SQLSTATE: 01665

+20272   **TABLE SPACE** *table-space-name* **HAS BEEN CONVERTED TO USE TABLE-CONTROLLED PARTITIONING INSTEAD OF INDEX-CONTROLLED PARTITIONING, ADDITIONAL INFORMATION:** *old-limit-key-value*

Explanation: When one of the following statements executed, *table-space-name* was converted to use table-controlled partitioning instead of index-controlled partitioning:

- ALTER INDEX with the CLUSTER NO clause
- ALTER TABLE...ADD PARTITION
- ALTER TABLE...ALTER PARTITION
- ALTER TABLE...ROTATE PARTITION
- CREATE INDEX...ENDING AT without the CLUSTER clause
- CREATE PARTITIONED INDEX
- DROP INDEX for a partitioning index

If the statement was ALTER INDEX, CREATE PARTITIONED INDEX, or DROP INDEX, the last partition's old value of *old-limit-key-value* was set to the highest possible value for an ascending index key column, or the lowest possible value for a descending index key column. For all other statements, *N is returned for *old-limit-key-value*.

If the statement was ALTER TABLE with the ROTATE PARTITION clause, then certain partitions might be left in REORG pending state. Refer to *Administration Guide* for more information on automatic conversion.

System action: The statement is successfully executed. If the statement was ALTER INDEX, CREATE PARTITIONED INDEX, or DROP INDEX, the LIMITKEY column in SYSIBM.SYSTABLEPART was set to the highest possible value for an ascending index key column, or the lowest possible value for a descending index key column.

SQLSTATE: 01666

+20348   **THE PATH VALUE HAS BEEN TRUNCATED.**

Explanation: The PATH value exceeded the limit of bytes that the PATH column of SYSIBM.SYSJAROBJECTS can contain. The PATH column of SYSIBM.SYSJAROBJECTS stores only the first 2048 bytes of the value passed to SQLJ.ALTER_JAVA_PATH.

System action: Processing continues.

User response: If you need to know the entire PATH value, query the SYSIBM.SYSJAVAPATHS table.

SQLSTATE: 01011

+20360   **TRUSTED CONNECTION CAN NOT BE ESTABLISHED FOR SYSTEM AUTHID** *authorization-name*

Explanation: A trusted connection cannot be established for *authorization-name*. A matching trusted context is not currently defined. SQLWARN8 is set to indicate that a trusted connection was not established.

System action: The attempt to create a trusted connection was not successful. A normal connection is created without any attributes of a trusted context.

Programmer response: Ensure that the trusted context has been correctly defined and try to re-establish a trusted connection.

SQLSTATE: 01679

+20365   **A SIGNALING NAN WAS ENCOUNTERED, OR AN EXCEPTION OCCURRED IN AN ARITHMETIC OPERATION OR FUNCTION INVOLVING A DECFLOAT.**

Explanation: A signaling NaN (sNaN) was encountered in an expression, arithmetic operation, or function involving a DECFLOAT column, or value resulted in an exception. In either case, the result is NAN, and a warning is issued.

System action: Execution of the statement continues. All non-error columns and expressions of the outer SELECT list are returned. If the statement is cursor controlled, then the cursor will remain open.

User response: Examine the expression for which the warning occurred to see you can determine the cause

of the problem. The problem might be data-dependent, in which case you must examine the data that was being processed at the time the error occurred.

SQLSTATE:: 01565

+20367 **OPTION** *clause* **IS NOT SUPPORTED IN THE CONTEXT IN WHICH IT WAS SPECIFIED**

Explanation: The *clause* in the statement is not supported in the context in which has been specified. The *clause* is ignored.

System action: Processing continues normally.

Programmer response: No change is required for the current release; however, it is recommended that the statement be modified to conform to valid SQL syntax.

SQLSTATE: 01680

+20371 **THE ABILITY TO USE TRUSTED CONTEXT** *context-name* **WAS REMOVED FROM SOME, BUT NOT ALL AUTHORIZATION IDS SPECIFIED IN THE STATEMENT.**

Explanation: An ALTER TRUSTED CONTEXT statement for *context name* contained a DROP USE FOR clause with multiple authorization IDs or PUBLIC, but one or more authorization IDs were not defined to use the trusted context.

System action: The statement is processed.

Programmer response: One or more users were removed from the definition of the trusted context, but one or more other users were not previously allowed to use the trusted context.

SQLSTATE: 01682

+20378 **A NON-ATOMIC** *statement* **STATEMENT SUCCESSFULLY COMPLETED FOR SOME OF THE REQUESTED ROWS, POSSIBLY WITH WARNINGS, AND ONE OR MORE ERRORS, AND THE CURSOR CAN BE USED**

Explanation: A non-atomic statement *statement* successfully processed some of the rows of data that were requested. However, one or more error conditions occurred, and some warnings might have also occurred. Use GET DIAGNOSTICS to obtain information about the error and warning conditions that occurred. The cursor can be used to retrieve data for the rows that were successfully processed.

System action: One or more rows were successfully processed, but one or more errors or warnings also occurred.

Programmer response: Analyze the error and warning

conditions to determine if the statement should be rolled back.

SQLSTATE:: 01683

+20458 **THE PROCEDURE** *procedure-name* **HAS ENCOUNTERED AN INTERNAL PARAMETER PROCESSING ERROR IN PARAMETER** *number1***. THE VALUE FOR PARAMETER** *number2* **CONTAINS FURTHER INFORMATION ABOUT THE ERROR.**

Explanation: The format or content of the parameter in ordinal position *number1* in the call to the procedure *procedure-name* is invalid. The output parameter specified in ordinal position *number2* contains information on how to respond to the error.

User response: Use the information in the output parameter specified in ordinal position *number2* to correct the format or content of the parameter value and call the procedure again.

SQLSTATE: 01H54

+20459 **THE PROCEDURE** *procedure-name* **HAD ENCOUNTERED AN INTERNAL PROCESSING ERROR. THE VALUE FOR PARAMETER** *number* **CONTAINS FURTHER INFORMATION ABOUT THE ERROR.**

Explanation: An error occurred when the procedure *procedure-name* was processing a request. The output parameter specified in ordinal position *number* contains information on how to respond to the error.

User response: An error occurred when the procedure procedure-name was processing a request. The output parameter specified in ordinal position number contains information on how to respond to the error. number to correct the error and call the procedure again.

SQLSTATE: 01H55

+20460 **THE PROCEDURE** *procedure-name* **SUPPORTS A HIGHER VERSION,** *version1***. THAN THE SPECIFIED VERSION,** *version2***, FOR PARAMETER** *number***.**

Explanation: A higher version, *version1*, for the parameter in ordinal position number is supported by the procedure *procedure-name*. The specified version, *version2*, is supported for the parameter.

User response: Check the documentation for the procedure to understand the additional features supported by the newer version of the parameter. Upgrade to the current version to take advantage of these additional features.

SQLSTATE: 01H56

+20461   THE PROCEDURE *procedure-name*
          RETURNED OUTPUT IN THE
          ALTERNATE LOCALE, *locale1*,
          INSTEAD OF THE LOCALE *locale2*,
          SPECIFIED IN PARAMETER *number*.

Explanation: The locale, *locale2*, specified in the
parameter in ordinal position *number* was not available
for the output of the procedure *procedure-name*. The
output is returned using locale *locale1*.

User response: Install the message file support on the
server for the specified locale, *locale2*, or specify a
supported locale.

SQLSTATE: 01H57

+20520   ATTEMPT TO USE A DEPRECATED
          FEATURE ON OBJECT *object-name*.
          REASON CODE *reason-code*

Explanation: The statement attempted to use a
deprecated feature.

reason-code
          A numeric value that identifies the deprecated
          feature:

          1   The statement attempted use the XML
                  schema decomposition feature.
                  Processing continues and the stored
                  procedure was invoked. This situation
                  can occur when the following stored
                  procedures are called:
                  • SYSPROC.XSR_COMPLETE with
                    the issuedfordecomposition flag set
                    to 1
                  • SYSPROC.XDBDECOMPXML
                  •
                    SYSPROC.XDBDECOMPXML100MB

System action: Processing continues as described in
the explanation.

User response: No change is required at this time.
However, you should update the statement to prepare
for future releases, when an error will be returned for
the same condition.

Programmer response: Change the statement for
future releases. Take the action that corresponds to the
reason-code value:

1   Update your SQL statement to change any
          implicit or explicit reference to the XML
          schema decomposition feature so that they use
          the XMLTABLE function for the decomposition
          of an XML document.

SQLSTATE: 01694

Related reference

↪ Statements (DB2 SQL)

+30100   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 DSNL031I
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.

SQLSTATE: 01558

Chapter 2. SQL error codes

SQL return codes that are preceded by a minus sign (-) indicate that the SQL statement execution was unsuccessful.

-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 2 of *SQL Reference* for information about the valid SQL character set.

SQLSTATE: 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.

SQLSTATE: 42603

-011   **COMMENT NOT CLOSED**

Explanation: A comment is not closed correctly with a comment delimiter. The comment is treated as if it were closed by the end of source file.

System action: The statement cannot be executed.

User response: Ensure that the comment delimiter is specified properly. This error is likely to cause other errors. Some statements might not have been processed as a result of a missing comment delimiter.

SQLSTATE: 42601

-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.

SQLSTATE: 42601

-051   *identifier-name* **(***sql-type***) WAS PREVIOUSLY DECLARED OR REFERENCED**

Explanation: The identifier name has already been defined for the indicated type of SQL object.

identifier-name
    The name that has already been used.

sql-type   The type of SQL object: TABLE, CURSOR, or STATEMENT.

The definition might have occurred implicitly. For example, *identifier-name* might have been found in the FROM clause of a SELECT, which causes it to be defined as a table.

A cursor name must be unique within the program or routine.

System action: The statement cannot be processed.

User response: Remove duplicate definitions or correct the references.

SQLSTATE: 3C000

-056   **AN SQLSTATE OR SQLCODE VARIABLE DECLARATION IS IN A NESTED COMPOUND STATEMENT**

Explanation: An SQLSTATE or SQLCODE variable declaration is in a nested compound statement instead of the outermost compound statement in the SQL routine.

System action: The statement cannot be processed.

User response: Change the routine definition so that the SQLSTATE and SQLCODE variables are only declared in the outermost compound statement of the SQL routine.

SQLSTATE: 42630

-058   **VALUE SPECIFIED ON RETURN STATEMENT MUST BE AN INTEGER**

Explanation: A RETURN statement is specified in an SQL procedure but the value specified is not an integer.

The return value for an SQL procedure must be an integer.

System action: The statement cannot be processed.

User response: Specify an integer value on the RETURN statement. Try the request again.

SQLSTATE: 428F2

-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.

For CREATE INDEX, a length specified for VARCHAR must not be greater than 1000, and an integer specified with DECFLOAT must be 34.

System action: The statement cannot be processed.

Programmer response: Correct the statement. Refer to chapter 2 of *SQL Reference* for rules for length and scale, and, the number of significant digits.

SQLSTATE: 42815

-078   **PARAMETER NAMES MUST BE SPECIFIED FOR ROUTINE** *routine-name*

Explanation: The routine does not have parameter names specified for all parameters.

routine-name
        The name of the routine.

When the SQL routine is defined with LANGUAGE SQL, a parameter name is required for each parameter that is defined. For native SQL procedures, LANGUAGE SQL is optional, but for external SQL procedures, LANGUAGE SQL is required.

System action: The statement cannot be processed.

Programmer response: Ensure that each defined parameter includes a parameter name.

SQLSTATE: 42629

Related reference

➦ CREATE TABLE (DB2 SQL)

-079   **QUALIFIER FOR OBJECT** *name* **WAS SPECIFIED AS** *qualifier1* **but** *qualifier2* **IS REQUIRED**

Explanation: The schema qualifier for the DB2 object must be *qualifier2*. The statement defines a new object named *name* with an explicit schema qualifier of *qualifier1*. Specifying a schema qualifier other than *qualifier2* is not allowed.

System action: The statement was not executed.

Programmer response: Change the statement in one of the following ways:

- Change the schema qualifier to *qualifier2*.
- Remove the schema qualifier, and let DB2 default it to *qualifier2*.

SQLSTATE: 428EK

-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 *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 precompile 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.

Routing code: 42612

-087   **A NULL VALUE WAS SPECIFIED IN A CONTEXT WHERE A NULL IS NOT ALLOWED**

Explanation: An SQL parameter or SQL variable having a null value was specified in a context in which a null value is not allowed. For example, an SQL statement can be specified with an SQL parameter or SQL variable on the PREPARE and EXECUTE statements. In these contexts the value of an SQL parameter or SQL variable must not be null.

System action: The statement cannot be executed.

User response: Correct the SQL statement. For more information, see *SQL Reference*.

SQLSTATE: 22004

-096   **VARIABLE** *variable-name* **DOES NOT EXIST OR IS NOT SUPPORTED BY THE SERVER AND A DEFAULT VALUE WAS NOT PROVIDED**

Explanation: The GETVARIABLE function was invoked for variable *variable-name*. However, a value does not exist for a variable with that name, and a default value was not provided.

- If the qualifier is SESSION, a user-defined variable with name *variable-name* has not been set.
- If the qualifier is SYSIBM, the server does not support a built-in session variable with name *variable-name*.

System action: The statement cannot be executed.

Programmer response: Change the invocation of the function to specify a default variable for *variable-name*, or change the name of a variable that does exist.

SQLSTATE: 42704

-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 specification syntax
- CREATE DISTINCT TYPE
- CREATE FUNCTION
- CREATE PROCEDURE
- ALTER FUNCTION
- COMMENT ON FUNCTION
- GRANT EXECUTE ON FUNCTION
- REVOKE EXECUTE ON FUNCTION
- DROP

Use the VARCHAR or VARGRAPHIC syntax specifying an explicit length as required.

System action: The statement cannot be executed.

Programmer response: Correct the statement.

SQLSTATE: 42601

-101   **THE STATEMENT IS TOO LONG OR TOO COMPLEX**

Explanation: DB2 cannot process the statement because it exceeds the system limits for length or complexity. Enabling parallelism will increase the complexity of the statement.

System action: DB2 cannot process the statement.

Programmer response: Divide the statement into

shorter or less complex SQL statements.

If the statement enables parallelism, try disabling parallelism. You may do this by using the DEGREE(1) bind option for static SQL, or by setting the CURRENT DEGREE special register to '1' for dynamic SQL.

SQLSTATE: 54001

-102   **STRING CONSTANT IS TOO LONG. STRING BEGINS** *string*

Explanation: The string constant beginning with *string* has a length greater than the maximum allowed length. Most strings have these limits:

- For a hexadecimal constant (X, GX, or UX), the number of hexadecimal digits must not exceed 32704.
- Any other character string constant must be short enough so that its UTF-8 representation requires no more than 32704 bytes.
- Any other graphic string constant must be short enough so that its UTF-8 representation requires no more than 32704 bytes.
- The sum of the lengths of the UTF-8 representations of the constant values in an ENDING AT clause must not exceed 765 bytes. This clause applies to CREATE TABLE, ALTER TABLE, CREATE INDEX, or ALTER INDEX.

In some contexts, however, the limit is smaller; see the *SQL Reference* for the specific cases.

For special registers, the allowable length depends on the particular special register. A string that exceeds the limit can be specified only through assignment from a host variable.

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: The requested function is not available interactively. If the error occurred in the context of an SQL statement embedded in an application program, the desired result can be achieved by assigning the long string to a host variable, and substituting that variable for the string constant in the SQL statement.

SQLSTATE: 54002

-103   *constant* **IS AN INVALID NUMERIC CONSTANT**

Explanation: The indicated *constant* begins with a digit, but is not a valid integer, decimal, decimal floating point, or float constant.

System action: The statement cannot be executed.

Programmer response: Correct the invalid constant.

SQLSTATE: 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.

This SQLCODE 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.

SQLSTATE: 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.

SQLSTATE: 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*. For each type of *name*, the *SQL Reference* lists the maximum allowed length.

For an SQL version ID, the name must not exceed 64 EBCDIC bytes, or 122 UTF-8 bytes.

System action: The statement cannot be processed.

Programmer response: Choose a shorter name for the object.

SQLSTATE: 46002

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 schema qualifier.

System action: The statement cannot be executed.

Programmer response: Remove the schema qualifier and reissue the statement.

SQLSTATE: 42601

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

Explanation:

The *clause* you specified is not allowed. If the clause was issued as a part of a CREATE INDEX, CREATE TABLE, CREATE TABLESPACE, ALTER TABLESPACE, ALTER TABLE, or ALTER INDEX statement, then refer to the appropriate section of *SQL Reference* for a description of the valid use of clauses for the statement. If the clause was issued for a ALTER TABLESPACE, then you are not allowed to explicitly state a LOGGED or NOT LOGGED clause for an XML table space.

System action: The statement cannot be executed.

Programmer response: Correct the SQL statement.

SQLSTATE: 42601

-110   **INVALID HEXADECIMAL CONSTANT BEGINNING** *constant*

Explanation: The string constant that begins with the specified *string* is invalid because it has at least one of the following errors:

- the string constant contains one or more characters that are not valid hexadecimal digits
- the string constant does not have an even number of digits
- for a UX or GX string constant, the number of digits is not a multiple of 4

System action: The statement cannot be executed.

Programmer response: Correct the invalid string constant.

SQLSTATE: 42606

-112   **THE OPERAND OF AN AGGREGATE FUNCTION INCLUDES AN AGGREGATE FUNCTION, AN OLAP SPECIFICATION, OR A SCALAR FULLSELECT**

Explanation: The operand of an aggregate function can be either an expression or DISTINCT followed by

an expression. The operand cannot be another aggregate function, an OLAP specification, or a scalar fullselect.

System action: The statement cannot be processed.

Programmer response: Correct the use of the aggregate function to eliminate the invalid expression and reissue the statement. Refer to Chapter 3 of *SQL Reference* for information about the proper usage of aggregate functions.

SQLSTATE: 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.

Certain SQL identifiers (for example names of buffer pools, databases, and plans) must contain only uppercase alphabetic or national characters and numerics; 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.

SQLSTATE: 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 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.

SQLSTATE: 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 2 of *SQL Reference* for information about the syntax of SQL statements.

SQLSTATE: 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 operation 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 operation does not match the number of columns on the left side.

System action: The statement cannot be executed. No data was inserted into the object table.

Programmer response: Correct the statement to specify one and only one value for each of the specified object columns.

SQLSTATE: 42802

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

Explanation: The table or view specified as the object of a DELETE or UPDATE statement also appears in the FROM clause of a subselect within the statement.

The table or view that is the object of a UPDATE or DELETE cannot also be used to supply the values to be inserted or to qualify 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 2 of *SQL Reference* for information about the syntax of SQL statements.

SQLSTATE: 42902

-119   **A COLUMN OR EXPRESSION IN A HAVING CLAUSE IS NOT VALID**

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

Grouping expressions can be used in a search condition in a HAVING clause. A grouping expression specifies only one value for each group. A grouping expression specified in this context must exactly match a grouping expression specified in the GROUP BY clause, with the exception of blanks, which are not significant.

System action: The statement cannot be executed.

Programmer response: The implied function is not supported by DB2. Refer to chapter 4 of *SQL Reference* for information about the proper usage of HAVING and GROUP BY clauses.

SQLSTATE: 42803

-120   **AN AGGREGATE FUNCTION OR OLAP SPECIFICATION IS NOT VALID IN THE CONTEXT IN WHICH IT WAS INVOKED**

Explanation: An aggregate function, a user-defined function that is sourced on an aggregate function, or an OLAP specification is not permitted in the following contexts:

- In a SET clause.
- In a VALUES clause.
- In a SET transition-variable statement.
- In an assignment statement.
- In the key-expression of an index definition.
- In the expression of a RETURN statement.

Aggregate functions or OLAP Specifications can only be specified in a WHERE clause if the WHERE clause appears within a subquery of a HAVING clause.

System action: The statement cannot be processed.

Programmer response: Change the statement so that the aggregate function or OLAP specification is not specified in a context where it is not allowed. Refer to chapter 4 of *SQL Reference* for information about restrictions on operands that can be specified within a WHERE clause, SET clause, VALUES clause, SET host-variable statement, SET transition-variable statement, assignment statement, or as the expression of a RETURN statement.

SQLSTATE: 42903

-121   **THE COLUMN** *name* **IS IDENTIFIED MORE THAN ONCE IN THE INSERT OR UPDATE OPERATION 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 operation, in the SET clause of an update operation, 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.

SQLSTATE: 42701

-122   **COLUMN OR EXPRESSION IN THE SELECT LIST IS NOT VALID**

Explanation: The SELECT statement contains one of these errors:

- The statement contains a column name and an aggregate 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. Grouping expressions can be used in a SELECT list. A grouping expression specifies only one value for each group. A grouping expression that is specified in this context must exactly match a grouping expression that is specified in the GROUP BY clause, except that blanks are not significant.

Attention: 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.

| An expression is specified in the SELECT clause but not in the GROUP BY clause.

| A *sort-key-expression* was specified in the ORDER BY clause, the result table contains grouped data, but the *select-clause* and ORDER BY clause contain a mixture of grouped data and non-grouped data. Grouping expressions can be used in a *sort-key-expression* of an ORDER BY clause. A grouping expression specifies only one value for each group. A grouping expression that is specified in this context must exactly match a grouping expression that is specified in the GROUP BY clause, except that blanks are not significant.

System action: The statement cannot be executed.

Programmer response: You can correct the statement by:

| Including the columns or expressions in the GROUP BY clause that are in the SELECT clause, or

| Removing the columns or expressions from the SELECT clause.

Refer to chapter 4 of *SQL Reference* for information about the use of GROUP BY clauses in SQL statements.

SQLSTATE: 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.

SQLSTATE: 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.

SQLSTATE: 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. Unless you use a static sensitive scrollable cursor, 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 processed. 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 4 of *SQL Reference* for information about restrictions on the declarations for cursors to be used for update.

SQLSTATE: 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 4 of *SQL Reference* for information about restriction on the use of the DISTINCT qualifier.

SQLSTATE: 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 2 of *SQL Reference* for information about the proper use of the NULL operand.

SQLSTATE: 42601

-129 **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 4 of *SQL Reference* for the definition of a subselect.

SQLSTATE: 54004

-130 **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.

SQLSTATE: 22019 if other than invalid ESCAPE pattern. 22025 if invalid ESCAPE pattern.

-131 **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. If the column data type is binary string, the expression on the right and the ESCAPE character must be binary strings.

System action: The statement cannot be executed.

Programmer response: Check the data type of every operand.

SQLSTATE: 42818

-132 **AN OPERAND OF** *value* **IS NOT VALID**

Explanation: The operation value can be the LIKE predicate, the ESCAPE clause, the LOCATE scalar function, the LOCATE_IN_STRING scalar function, the POSITION scalar function, or the POSSTR scalar function. The operand or argument of *value* was not valid for one of the following reasons:

- The match-expression operand of a LIKE or NOT LIKE predicate must be a string expression.
- The pattern-expression operand of the LIKE or NOT LIKE predicate, or search-string argument of the LOCATE, LOCATE_IN_STRING, POSITION, or POSSTR function must be a string expression that can be specified by any one of the following:
  - A constant
  - A special register
  - A host variable (including a LOB locator variable)
  - A scalar function whose arguments are any of the above (though nested function invocations cannot be used)
  - A CAST specification whose arguments are any of the above
  - An expression that concatenates (using CONCAT or ||) any of the above
- The source-string argument of the LOCATE, LOCATE_IN_STRING, POSITION, or POSSTR function must be a string expression that can be specified by any of the following:
  - A constant
  - A special register
  - A host variable (including a LOB locator variable)
  - A scalar function whose arguments are any of the above (though nested function invocations cannot be used)
  - A CAST specification whose arguments are any of the above
  - A column name
  - An expression that concatenates (using CONCAT or ||) any of the above
- The escape-expression operand of the LIKE or NOT LIKE predicate must be a string expression that can be specified by any of the following:
  - A constant
  - A host variable (including a LOB locator variable)
  - A scalar function whose arguments are any of the above (though nested function invocations cannot be used)
  - A CAST specification whose arguments are any of the above

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

A LIKE predicate, ESCAPE clause, LOCATE scalar function, LOCATE_IN_STRING scalar function, POSITION scalar function, or POSSTR scalar function cannot be used with DATE, TIME, or TIMESTAMP.

System action: The statement cannot be processed.

Programmer response: Check and correct the syntax of the LIKE predicate, or LOCATE, LOCATE_IN_STRING, POSITION, or POSSTR scalar function.

SQLSTATE: 42824

-133   **AN AGGREGATE 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 an aggregate 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 4 of *SQL Reference* for information about restrictions on the syntax of the HAVING clause.

SQLSTATE: 42906

-134   **IMPROPER USE OF A STRING, LOB, OR XML VALUE**

Explanation: The SQL statement references a string, LOB, or XML value that is not valid in the context that was specified.

This error can be issued when the length attribute of a string value is too long for the context in which it is used. The string value that you specified is invalid for one of the following reasons:

* A string value with a length attribute greater than 255 bytes is not allowed in a SELECT list that also specifies DISTINCT.
* A string value with a length attribute greater than 255 bytes is not allowed for a string representation of a number.
* A string value with a length attribute greater than 16000 bytes is not allowed for a sort operation such as an ORDER BY clause.
* A string value with a length attribute greater than 32704 bytes is not allowed as an argument to the REPLACE function.

This error can also be issued when LOB or XML values are specified in a context in which they are not

allowed. The LOB or XML value that you specified is invalid for one of the following reasons:

* A LOB or an XML value is not allowed in an ORDER BY clause.
* A LOB or an XML value is not allowed in a check constraint.

Attention: A token might be returned with the name of the column or special register that resulted in the error. The nature of the error and the syntax in which it occurred determines whether a token is returned.

System action: The statement cannot be processed.

Programmer response: DB2 does not support the requested operation on the string, LOB, or XML value. Refer to *SQL Reference* for information about restrictions on the specification and manipulation of string values.

SQLSTATE: 42907

-136   **SORT CANNOT BE EXECUTED BECAUSE THE SORT KEY LENGTH TOO LONG**

Explanation: A sort key is derived from the list of columns specified following a DISTINCT keyword, or in an ORDER BY or GROUP BY clause in a query. If both a DISTINCT keyword 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 16000 bytes. In attempting to process the SQL statement, the internal length of the sort key derived from the DISTINCT and ORDER BY (or GROUP BY), or, the DISTINCT or ORDER BY (or GROUP BY) specifications was found to exceed that maximum limit.

| The error can also occur for an ORDER BY specification
| for the XMLAGG function. The internal length of the
| sort key for XMLAGG cannot exceed 4000 bytes. In
| attempting to process the XMLAGG function
| invocation, the internal length of the sort key derived
| from the ORDER BY specification was found to exceed
| that maximum limit.

System action: The statement cannot be processed.

User response: The statement must be modified such that the internal length of the sort key does not exceed the maximum limit. In general, this means that one or more column names must be deleted from the ORDER BY or GROUP BY clause, or deleted from the list following the DISTINCT keyword.

SQLSTATE: 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 *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.

SQLSTATE: 54006

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

Explanation: One of the following conditions exists:

- The value of the second argument of the SUBSTR or SUBSTRING function is less than 1 or greater than M.

- The value of the third argument of the SUBSTR or SUBSTRING function is an integer constant 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 or SUBSTRING function have legal values according the rules listed in the Explanation.

SQLSTATE: 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 or RESIGNAL SQLSTATE can appear only in certain contexts, such as in a trigger body or in an SQL Procedure.

Additionally, This SQLCODE will also be issued if a distributed private protocol application uses SQL statements that were implemented after Version 7. DB2 limits the SQL statements that a distributed private protocol application can use to Version 7 or lower SQL statements. See Part 4 of *Application Programming and SQL Guide* for information.

System action: The statement cannot be executed.

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

SQLSTATE: 42612

-144 INVALID SECTION NUMBER *number*

Explanation: One of the following:

- The user attempted to execute an invalid section.

- This release of DB2 does not support the SQL statement.

- 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:

```
  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).

```
  SELECT STMTNO, TEXT
FROM   SYSIBM.SYSPACKSTMT
WHERE  COLLID    = collection-id AND
NAME      = package-id    AND
VERSION   = version-name  AND
SECTNO    = number        AND
BINDERROR = 'Y';
```

If that query returns any rows, the section is invalid. Refer to the error messages issued during the bind to determine the cause. Correct any errors and bind the package again, using the REPLACE option.

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:

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

When executing from a package, use:

```
   SELECT *
FROM   SYSIBM.SYSPACKSTMT
WHERE  SECTNO = 0
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.

SQLSTATE: 58003

| **-147** | **ALTER FUNCTION** *function-name* **FAILED BECAUSE SOURCE FUNCTIONS OR SPATIAL FUNCTIONS CANNOT BE ALTERED** |

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

To change an existing source function or spatial 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.

SQLSTATE: 42809

| **-148** | **THE SOURCE TABLE** *source-name* **CANNOT BE ALTERED, REASON** *reason-code* |

Explanation: The ALTER statement issued could not be processed for the reason specified by *reason-code* as follows:

01 The ALTER statement specified an ALTER COLUMN clause that attempted to drop the default value, alter the default value, or change the length of the column. The column cannot be altered because the column has a field procedure or is involved in a referential constraint. The default value cannot be changed because the column has a field procedure.

02 The ALTER statement specified an ALTER COLUMN clause that attempted to drop the default value, alter the default value, or the length of the column. The column cannot be altered because *source-name* is a table that has an edit procedure or valid procedure, is defined with data capture changes, or is a global temporary table.

03 The ALTER statement causes a new table version to be generated while the table is defined with data capture changes.

04 The ALTER statement cannot be used to define a clone table because a clone table is already defined for *source-name*.

05 The ALTER statement cannot be used to define a clone table because table *source-name* is not in a universal table space.

06 The ALTER statement cannot be used to define a clone table because table *source-name* is involved in a referential constraint.

07 The ALTER statement cannot be used to define a clone table because table *source-name* has an after trigger defined on it.

08 The ALTER statement cannot be used to define a clone table because table *source-name* is a materialized query table.

09 The ALTER statement cannot be used to define a clone table because table *source-name* has active versioning.

10 The ALTER statement cannot be used to define a clone table because table space of table *source-name* or an index on table *source-name* was created with DEFINE NO, and the data set is not yet defined.

11 The ALTER statement attempted to change a table that has a defined clone, or a table that is a clone.

12 The ALTER statement cannot be used to define a clone table because table *source-name* is defined with an edit procedure, valid procedure, or field procedure.

13 The ALTER statement cannot be processed because an index exceeds versioning limit of 16.

System action: The statement cannot be processed.

Programmer response: Change *source-name* to the name of an object that can be altered as specified and reissue the statement, or take an appropriate action for the situation:

01 A column that is involved in referential integrity constraints, or that has a defined field procedure, cannot be altered.

02 A column that is defined with an edit procedure or valid procedure, or a declared global temporary table cannot be altered.

03 A column that belongs to a table defined with data capture changes cannot be altered.

04 Before defining a clone table, verify that there is no clone table already defined for *source-name*.

05 Before defining a clone table, verify that table *source-name* is in a universal table space.

06	Before defining a clone table, verify that table *source-name* is not involved in a referential constraint.
07	Before defining a clone table, verify that table *source-name* does not have any AFTER triggers defined on it.
08	Before defining a clone table, verify that table *source-name* is not a materialized query table.
09	Before defining a clone table, verify that table *source-name* does not have active versioning.
10	Before defining a clone table, verify that the data sets for *source-name* and its indexes are defined.
11	The clone table must be dropped (ALTER TABLE statement with the DROP CLONE clause) before the column can be altered.
12	Before defining a clone table, verify that table *source-name* does not have an edit procedure, valid procedure, or field procedure.
13	Reduce the number of versions for the index, before issuing the ALTER statement again.

SQLSTATE: 42809

-150 **THE OBJECT OF THE INSERT, DELETE, UPDATE, MERGE, OR TRUNCATE STATEMENT IS A VIEW, SYSTEM-MAINTAINED MATERIALIZED QUERY TABLE, 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, DELETE, MERGE, or TRUNCATE statement in a triggered action. Transition tables are read-only.
- The view named in the INSERT, UPDATE, DELETE, MERGE, or TRUNCATE statement is defined in such a way that the requested insert, update, delete, or truncate 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 built-in 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.

   Truncates against a view are always prohibited.

- An auxiliary table or an XML table was named in a TRUNCATE statement.

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

User response: The requested function cannot be performed on the view. Refer to chapter 2 of *SQL Reference* for further information regarding inserting, deleting, updating, and truncating views.

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

SQLSTATE: 42807

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

Explanation: The requested function is not supported by DB2.

column-name
   The name of the column that could not be updated.

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 ROW CHANGE TIMESTAMP 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 was not executed. No data was updated in the object table or view.

Programmer response: Refer to the description of the UPDATE statement in *SQL Reference* for information about restrictions on the ability to update ROWID columns, identity columns, row change timestamp columns, and columns in partitioned tables and views.

SQLSTATE: 42808

Related reference

⮕ UPDATE (DB2 SQL)

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

Explanation: The DROP *clause* of an ALTER TABLE statement tried to drop a constraint that does not match the *constraint-type* in the DROP clause. *clause* must identify an appropriate *constraint-type* as follows:

REFERENTIAL CONSTRAINT
    The identified constraint must be a referential constraint.

CHECK CONSTRAINT
    The identified constraint must be a check constraint.

PRIMARY KEY CONSTRAINT
    The identified constraint must be a primary key constraint.

UNIQUE KEY CONSTRAINT
    The identified constraint must be a unique key 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.

SQLSTATE: 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 fullselect that is specified in the CREATE VIEW, CREATE TABLE, 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 or table 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 or table. Refer to chapter 2 of *SQL Reference* for information about the syntax of the CREATE VIEW statement, the CREATE TABLE statement, or the DECLARE GLOBAL TEMPORARY TABLE statement.

SQLSTATE: 42908

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

Explanation: The view defined in the CREATE VIEW statement, the table defined in the CREATE TABLE statement, or the table declared in the DECLARE GLOBAL TEMPORARY TABLE statement is not valid because the view or table definition references a remote object.

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

Programmer response: Refer to Chapter 3 of *SQL Reference* for information about restrictions on the definitions for views, materialized query tables, or declared temporary tables.

SQLSTATE: 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. Additionally, a DROP TABLE SQL statement cannot be used to drop a clone table.

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.

SQLSTATE: 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.

SQLSTATE: 42810

-158 **THE NUMBER OF COLUMNS SPECIFIED FOR THE VIEW OR TABLE IS NOT THE SAME AS THE NUMBER OF COLUMNS SPECIFIED BY THE FULLSELECT, 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: One of the following situations has occurred:

- The number of column names that are specified for a view in a CREATE VIEW statement is not the same as the number of elements that are specified in the SELECT clauses of the fullselect that follows. These elements might be column names, SQL functions, and expressions, for example.

- The number of column names that are specified for a table in a CREATE TABLE statement is not the same as the number of columns in the result table of the fullselect that follows.

- The number of column names that are specified in a correlation clause is not the same as the number of columns in the corresponding table, view, table expression, or table function.

- The number of column names that are specified in a column list of a common table expression is not the same as the number of elements specified in the fullselect.

System action: The statement cannot be processed.

Programmer response: Specify a column name for each column in the result, and try the request again.

SQLSTATE: 42811

Related reference

➥ Statements (DB2 SQL)

-159 **THE STATEMENT REFERENCES** *object-name* **WHICH IDENTIFIES AN** *object-type* **RATHER THAN AN** *expected-object-type*

Explanation: The object *object-name* was specified as part of a statement, and refers to an object of type *object-type* instead of the expected type *expected-object-type*. The type of the object that is provided with the statement must match the type that is identified by *expected-object-type*. For example, if the statement is DROP ALIAS TED.T1, then TED.T1 must be an alias name.

If *object-type* or *expected-object-type* is TABLE, and *object-type* or *expected-object-type* is a particular type of table, then the type of table was not valid for the statement that was specified.

System action: The statement cannot be executed.

Programmer response: Change the statement to match the type of object that is identified by *expected-object-type*. For example:

- An ALTER VIEW statement must reference an existing view.

- A COMMENT ON ALIAS statement must specify the name of an alias, and not the name of a table or view.

- A COMMENT ON TABLE statement must reference an existing table or view.

- A CREATE INDEX statement with the UNIQUE keyword must specify a table that is not a materialized query table.

- A CREATE INDEX statement must specify the name of a table that is not a clone table.

- A CREATE TRIGGER statement must specify a table in the ON clause that is not a materialized query table. That is, a trigger cannot be defined for a materialized query table.

- A CREATE TRIGGER statement must specify the name of a table that is not a clone table.

- A DROP ALIAS statement must specify the name of an alias, and not the name of a table or view.

- A DROP TABLE statement must reference an existing table. If an alias is specified, then the table that the alias refers to is dropped. Use the DROP ALIAS statement to drop the alias.

- A DROP VIEW statement must reference an existing view.

- A REFRESH TABLE statement must refer to a materialized query table.

SQLSTATE: 42809

-160 THE WITH CHECK OPTION CLAUSE IS NOT VALID FOR THE SPECIFIED VIEW

Explanation: The WITH CHECK OPTION clause does not apply to a view definition under 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.
- A view on which the specified view definition is dependent has an INSTEAD OF trigger defined.

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

Programmer response: Refer to chapter 2 of *SQL Reference* for rules regarding use of the WITH CHECK OPTION in view definitions.

SQLSTATE: 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 operation. 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 operation was rejected. Note that this may be a data-dependent condition.

SQLSTATE: 44000

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

Explanation: The authorization ID *auth-id1* 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 'SYSADM' or 'DBADM' authority can create views for other authorization IDs. The DBADM privilege should be granted on any of the databases that contain at least one of the tables on

which this CREATE VIEW is based.

SQLSTATE: 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 3 of *SQL Reference* for rules for each argument of the scalar function *function-name*.

SQLSTATE: 42605

-171 THE DATA TYPE, LENGTH, OR VALUE OF ARGUMENT *argument-position* OF *function-name* IS INVALID

Explanation: The data type, the length, or the value of an argument of a scalar function is incorrect.

argument-position
    An integer that identifies the position of the incorrect argument in the function invocation.

function-name
    The name of the scalar function.

System action: The statement that contains the function cannot be processed.

Programmer response: Correct the invocation of the function, and reissue the statement.

Problem determination: If the encoding scheme is EBCDIC or ASCII, a possible reason for this error is that a character argument was specified for a built-in function that expects a graphic argument, or a graphic argument was specified for a built-in function that expects a character argument. The UNICODE encoding scheme supports the mixing of character and graphic arguments, but EBCDIC and ASCII do not.

If the function is a string function, this code might be issued if a string unit was required but not specified. The string unit keywords are CODEUNITS16, CODEUNITS32, and OCTETS.

SQLSTATE: 42815

Related reference

Scalar functions (DB2 SQL)

-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 updatable, change the isolation level specified on the WITH clause.

SQLSTATE: 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 SQLERRM.
- 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 *SQL Reference* for a list of valid DATE and TIME formats.

SQLSTATE: 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. Range of datetime values

Datetime		Numeric Range
Years		0001 to 9999
Months		1 to 12
Days	April, June, September, November (months 4, 6, 9, 11)	1 to 30

Table 2. Range of datetime values (continued)

Datetime		Numeric Range
	February (month 2)	1 to 28 (Leap year 1 to 29)
	January, March, May, July, August, October, December (months 1, 3, 5, 7, 8, 10, 12)	1 to 31
Hours		0 to 24 (If hour is 24, other parts of time values are zeroes. If hour is USA, maximum hour is 12.)
Minutes		0 to 59
Seconds		0 to 59
Microseconds		0 to 999999

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 2 of *SQL Reference* for information on string data formats.

SQLSTATE: 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.

SQLSTATE: 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.

SQLSTATE: 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.

SQLSTATE: 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.

SQLSTATE: 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.

SQLSTATE: 22505

-187   **A REFERENCE TO A CURRENT DATETIME 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.

SQLSTATE: 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.

SQLSTATE: 22503

-189   **CCSID** *ccsid* **IS INVALID**

Explanation: To determine the subtype of an input host variable or result column, the SYSSTRINGS 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.

- The CCSID is outside the acceptable range of values. The CCSID must be between 1 and 65533, inclusive, or the value 65535.
- A DBCS CCSID was specified when casting to CHAR, VARCHAR or CLOB.
- An SBCS or mixed CCSID, or 65535 was specified when casting to a graphic data type.
- CCSID 65535, which is valid only for data with the FOR BIT DATA attribute, was specified when casting to a CLOB.

This error can occur when SYSSTRINGS is accessed with a pair of CCSIDs to 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 SYSSTRINGS.

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 SYSSTRINGS, it can be defined by inserting a user-provided row. If a valid CCSID is misclassified in a user-provided row, that row can be updated to correct the mistake. Refer to the appendices of *Installation Guide* for more information on CCSIDs and to *SQL Reference* for more information on the SYSSTRINGS 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.

SQLSTATE: 22522

-190   **THE ATTRIBUTES SPECIFIED FOR THE COLUMN** *table-name.column-name* **ARE NOT COMPATIBLE WITH THE EXISTING COLUMN DEFINITION**

Explanation: The attributes for the column *column-name* of the table *table-name* in an ALTER TABLE statement are not compatible with the attributes of the existing column. The error was returned for one of the following reasons:

- If a SET DATA TYPE clause is specified, the existing column is not compatible with the new data type that was specified, or is of a data type that cannot be changed. The ALTER TABLE ALTER COLUMN SET DATA TYPE statement only allows changing columns of data type character, numeric, or binary.
- If a RESTART, SET GENERATED, SET INCREMENT BY, SET MINVALUE, SET NO MINVALUE, SET MAXVALUE, SET NO MAXVALUE, SET CYCLE, SET NO CYCLE, SET CACHE, SET NO CACHE, SET ORDER, or SET NO ORDER clause is specified, the existing column is not defined as an identity column. These clauses can only be specified for a column that is defined as an identity column.
- If a SET DEFAULT or DROP DEFAULT clause is specified, the existing column does not have a defined default value, or the column has NOT NULL as the null attribute.
- If a SET DEFAULT or DROP DEFAULT clause is specified, the existing column is defined as an identity column, ROWID, or row change timestamp column.

System action: The statement cannot be executed.

Programmer response: Make the attributes that are specified in the statement compatible with the existing column definition, remove the attribute specification, or specify a different column name.

SQLSTATE: 42837

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

Explanation: The operation required the conversion of a mixed data character string to a different coded character set. The string could not be converted 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 2 of *SQL Reference* .

SQLSTATE: 22504

-197   **A QUALIFIED COLUMN NAME IS NOT ALLOWED IN THE ORDER BY CLAUSE WHEN A SET OPERATOR IS ALSO SPECIFIED**

Explanation: The ORDER BY clause of a fullselect that includes a set operator, such as UNION, EXCEPT, or INTERSECT, cannot have qualified column names.

System action: The statement cannot be processed.

Programmer response: Change the statement to ensure that all column names in the ORDER BY clause are unqualified.

SQLSTATE: 42877

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

Explanation: The operand (host variable or string constant) 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, then 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.

SQLSTATE: 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 keyword *keyword*. A colon or SQL delimiter might be missing.

Verify that the clauses are in the correct order. If the reserved word that is identified in the messages is listed as a reserved word, make the word a delimited identifier. Refer to Appendix B of *SQL Reference* for a detailed list of reserved words.

SQLSTATE: 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.

SQLSTATE: 42702

-204 *name* **IS AN UNDEFINED NAME**

Explanation: The object identified by *name* is not defined in the DB2 subsystem. This SQLCODE can be generated for any type of DB2 object.

If the error was encountered for a particular version of a native SQL procedure, the *name token* may return the following information:

```
name-of-procedure VERSION version-id
```

For COMMENT or DROP, if the specified object is a package, the implicitly or explicitly specified version of the package is not defined in the DB2 subsystem. If the version-ID was not explicitly specified, the statement attempted to process the null version for the identified package, but the null version does not exist. The VERSION clause can be used to specify a specific version to be processed.

Attention: A function cannot be sourced on the COALESCE, NULLIF, RAISE_ERROR, RID, 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: 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.

If the specified object is a routine, issue the CREATE

| PROCEDURE or CREATE FUNCTION statement to define the routine to DB2. Issue the -START PROCEDURE command to activate the new definition.

| If the specified object is a package, issue the COMMENT or DROP statement with the VERSION clause to identify the specific version to be processed.

| **SQLSTATE:** 42704

| 46002

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

| **Explanation:** No column with the specified *column-name* occurs in the table *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.

| **SQLSTATE:** 42703

| **-206**   *name* **IS NOT VALID IN THE CONTEXT WHERE IT IS USED**

| **Explanation:** *name* is not valid in the context where it was specified. This error can occur for the following situations:

| • The specified column is not a column of any of the source or target tables or views of the statement.

| – In a SELECT or DELETE statement, the specified column is not a column of any of the tables or views that are identified in a FROM clause in the statement.

| – A column list of an SQL data change statement specified the name of a column of the target table or view of the statement.

| • A VALUES clause of an SQL data change statement specified the name of a column of the target table.

| • The left side of an assignment clause of an SQL data change statement specified a column that is not a column of the target table or view of the statement, or an INCLUDE column defined for the statement. For a DELETE statement, the target of an assignment clause can only be an INCLUDE column.

| • The right side of an assignment clause of an SQL data change statement referenced an INCLUDE column for expression. A column defined in an INCLUDE clause can only be specified on the left side of an assignment in an SQL data change statement.

| • A column defined in the INCLUDE clause of an UPDATE or DELETE statement was referenced in the WHERE clause of that statement.

| • A qualified column name was specified, but the table designator that is specified as the qualifier is not defined in this context.

| • For a GROUP BY clause, a correlated reference to a column was specified for a grouping expression, which is not allowed.

| • For an ORDER BY clause, the specified column is a correlated column reference in a subselect, which is not allowed.

| • A correlated reference to a column was specified in an OLAP specification. Each column name that is referenced in an OLAP specification must unambiguously reference a column of the result table of the subselect that contains the OLAP specification.

| • 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 specified an old transition-variable that is not valid for the type of trigger.

| – The reference name does not resolve to the name of a column or transition-variable.

| **System action:** The statement cannot be processed.

| **Programmer response:** Verify that the column and table designators are specified correctly in the SQL statement. In the case of a SELECT statement, verify that all of the required tables or views were named in the FROM clause. If the column was intended to be a correlated reference, qualify the column with the correct table designator.

| For an ORDER BY clause, ensure that there are no correlated column references.

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

| For a DELETE statement, ensure that only columns defined in the INCLUDE clause are specified on the left side of assignments.

| **SQLSTATE:** 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 *subselect*.

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 4 of *SQL Reference* for information about restrictions on the use of the ORDER BY clause to order the result of an SQL SELECT.

SQLSTATE: 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.

SQLSTATE: 42712

-214 **AN EXPRESSION IN THE FOLLOWING POSITION, OR STARTING WITH** *position-or-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:

1   The fullselect of the select-statement is not a subselect. Expressions are not allowed in the ORDER BY clause for this type of select-statement. This reason code occurs only when *clause-type* is ORDER BY.

2   DISTINCT is specified in the SELECT clause, and either a column name in the ORDER BY clause cannot be matched exactly with a column name in the select list, or a *sort-key-expression* is specified in the ORDER BY clause. This reason code occurs only when *clause-type* is ORDER BY.

3   The select list includes an aggregate function or the subselect includes a GROUP BY clause and the expression is not an aggregate function or does not match exactly with an expression in the select list.

4   Grouping is caused by the presence of an aggregate function in the ORDER BY clause. This reason code occurs only when clause-type is ORDER BY.

5   Expression in a GROUP BY clause cannot

contain a scalar-fullselect. This reason code occurs only when *clause-type* is GROUP BY.

6   Invalid use of scalar-fullselect. This reason code can be issued when the RETURN statement of an SQL function contains a scalar-fullselect, or a scalar-fullselect is passed as an argument on a CALL statement for a parameter that is defined as an input parameter (IN).

System action: The statement cannot be executed.

Programmer response: Modify the select-statement based on the reason specified by the *reason-code*. Use the following suggestions to modify the select-statement:

1   Remove the expression from the ORDER BY clause. If attempting to reference a column of the result, change the sort key to the *simple-integer* or *simple-column-name* form. See the ORDER BY syntax diagram in the DB2 SQL Reference for more information.

2   Remove DISTINCT from the SELECT clause.

3   Change the expression in the ORDER BY or GROUP BY clause to an aggregate function or change the clause to use a numeric column identifier or a column name.

4   Add a GROUP BY clause or remove the aggregate function from the ORDER BY clause.

5   Remove the scalar fullselect from the GROUP BY clause.

6   Remove the scalar fullselect from the statement.

SQLSTATE: 42822

-216 **THE NUMBER OF ELEMENTS ON EACH SIDE OF A PREDICATE OPERATOR DOES NOT MATCH. PREDICATE OPERATOR IS** *operator*.

Explanation: The number of expressions specified on the left-hand side of OPERATOR *operator* is unequal to either the number of values returned by the fullselect or to the number of expressions specified on the right-hand side of the operator. The number of expressions and the number of values/expressions on either side of the operator must be equal.

System action: The statement was not executed.

Programmer response: Change the number of expressions to match the number of values returned by the fullselect or vice versa.

SQLSTATE: 428C4

-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 2 of *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.

SQLSTATE: 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 2 of *SQL Reference* for information on defining an explanation table.

SQLSTATE: 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 *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 2 of *SQL Reference* for information on defining an explanation table.

SQLSTATE: 55002

-222   **AN UPDATE OR DELETE OPERATION WAS ATTEMPTED AGAINST A HOLE USING CURSOR** *cursor-name*

Explanation: DB2 could not process a positioned update or delete with cursor *cursor-name* that is defined as SENSITIVE STATIC. The application program attempted to execute an UPDATE or DELETE WHERE CURRENT OF cursor statement at a time when the specified cursor was positioned on a row of the object table that is a *hole*. Each row that the cursor is positioned on, that is to be updated or deleted must not be a *hole*:

- An *update hole* occurs when the corresponding row of the underlying table has been updated, and the updated row no longer satisfies the search condition that is specified in the SELECT statement of the cursor.
- A *delete hole* occurs when the corresponding row of the underlying table has been deleted.

This error might be issued if the following situations occur:

- If the cursor is not a rowset cursor, then the row corresponding to the current cursor position is either an update hole, or a delete hole. DB2 detects these holes when DB2 tries to update or delete the current row of the result table for the cursor *cursor-name*, and cannot locate the corresponding row of the underlying table.
- If the cursor is a rowset cursor, then a row corresponding to a row of the current rowset cursor position is either an update hole or a delete hole. DB2 detects these holes when DB2 tries to update or delete the current row of the result table for cursor *cursor-name*, and cannot locate the corresponding row or rows of the underlying table.

System action: The statement cannot be processed. No data was updated or deleted, and the cursor position is unchanged.

Programmer response: Correct the logic of the application program to ensure that the cursor is correctly positioned on the intended row or rows of the object table, and that the intended rows are not *holes*, before the DELETE or UPDATE statement is executed.

- If the cursor is not a rowset cursor, then issue a FETCH statement to position the cursor on a row that is not a hole. Then, reissue the UPDATE or DELETE statement.
- If the cursor is a rowset cursor, and is also the positioned UPDATE or DELETE statement intended to affect a single row corresponding to the rows of the current rowset cursor position (this means for a FOR ROW n of ROWSET clause was specified), then change the UPDATE or DELETE statement to process the rows that are not holes, one at a time.

| • If the cursor is a rowset cursor, and is also the positioned UPDATE or DELETE statement intended to affect all rows corresponding to the rows of the current rowset cursor position (this means for a FOR ROW n of ROWSET clause was not specified), then change the UPDATE or DELETE statement to process the rows that are not holes, one at a time. Add a FOR ROW n of ROWSET clause to the UPDATE or DELETE statement to indicate which row of the cursor is to be updated or deleted.

| **SQLSTATE:** 24510

-224 **THE RESULT TABLE DOES NOT AGREE WITH THE BASE TABLE USING** *cursor-name*

Explanation: DB2 attempted a positioned UPDATE or DELETE was attempted on a row that no longer matches its previous condition. The column values in the result table row do not match the current values in the base table row because the row was updated between the time it was inserted into the result table and the positioned update or delete was executed.

cursor-name
> Name of the cursor used for the positioned update or delete.

System action: The statement cannot be processed. The cursor is positioned on the same row.

Programmer response: Correct the application program to handle this error condition or change isolation levels so the base row cannot be updated during the cursor operation.

SQLSTATE: 24512

-225 **FETCH STATEMENT FOR** *cursor-name* **IS NOT VALID FOR THE DECLARATION OF THE CURSOR**

Explanation: DB2 could not process a FETCH statement for cursor *cursor-name* because it contained a disallowed keyword. One of the following errors have occurred:

• A FETCH statement for a non-scrollable cursor specified one of the keywords PRIOR, FIRST, LAST, ABSOLUTE, RELATIVE, CURRENT, BEFORE, or AFTER. These keywords are disallowed for a cursor that was not declared with the SCROLL attribute, however, the CURRENT clause is allowed with a non-scrollable cursor only when combined with the CONTINUE clause.

• CONTINUE was specified on the FETCH statement, but the specified cursor was opened for a multiple-row fetch operation. This combination is not supported.

System action: The statement cannot be processed. No data was written to the output host variables.

Programmer response: If a scrolling option was

specified on the FETCH statement for a non-scrollable cursor, correct the FETCH statement to exclude the disallowed keyword, or, correct the DECLARE CURSOR statement to include the appropriate SCROLL option. If the CONTINUE clause was specified for a multiple-row cursor, change the application to use single row fetch for this cursor. If multiple-row fetch is required, use another technique, such as a LOB locator for retrieving large LOB or XML values.

SQLSTATE: 42872

-227 **FETCH** *fetch-orientation* **IS NOT ALLOWED, BECAUSE CURSOR** *cursor-name* **HAS AN UNKNOWN POSITION (** *sqlcode***,** *sqlstate* **)**

Explanation: The cursor position for *cursor-name* is unknown. The previous multiple-row FETCH for cursor *cursor-name* resulted in an error (SQLCODE *sqlcode*, SQLSTATE *sqlstate*) in the middle of processing multiple rows that were retrieved from DB2. One or more of the requested rows could not be returned to the program following the error, leaving the position of the cursor unknown.

If an indicator structure had been provided on the previous multiple-row FETCH, a positive SQLCODE would have been returned and all of the rows that were retrieved from DB2 could have been returned to the application program.

System action: The statement cannot be processed. The cursor position is not changed.

Programmer response: Close and reopen the cursor to reset the position. For scrollable cursors, you can change the FETCH statement to specify one of the other fetch orientations (such as FIRST, LAST, BEFORE, AFTER, or ABSOLUTE) to establish a valid cursor position and fetch a row of data.

SQLSTATE: 24513

-228 **FOR UPDATE CLAUSE SPECIFIED FOR READ-ONLY CURSOR** *cursor-name*

Explanation: A cursor was declared read-only with the INSENSITIVE SCROLL option, but the SELECT statement contained a FOR UPDATE clause.

cursor-name
> Name of the cursor used for the FETCH.

System action: The statement cannot be processed.

Programmer response: To define a scrollable cursor that is read-only, specify INSENSITIVE SCROLL, but do not specify FOR UPDATE clause. To define a scrollable cursor that can be updated, specify SENSITIVE SCROLL. Correct the application program to DECLARE CURSOR appropriately.

SQLSTATE: 42620

| -229 | THE LOCALE *locale* SPECIFIED IN A SET LC_CTYPE 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. The value of the variable *locale* indicates what locale DB2 is using when it processed the statement. DB2 used the locale that was either specified on the SET CURRENT LOCALE LC_CTYPE statement or the locale that was in effect at the time the locale access was attempted.

System action: The statement cannot be executed.

Programmer response: Depending on whether the locale was explicitly specified in a SET CURRENT LOCALE LC_CTYPE statement or the current locale was used implicitly, complete one of the following actions:

- If the statement was a SET CURRENT LOCALE LC_CTYPE statement, re-specify a locale that is correct (known and available to DB2).

- If the statement was something other than SET CURRENT LOCALE LC_CTYPE, then the statement contained a locale sensitive interface (the UPPER function is an example of a locale sensitive interface).

Issue the following statement to determine the value of the locale in use by your program:

```
SELECT CURRENT LOCALE LC_CTYPE FROM
SYSIBM.SYSDUMMY1.
```

Another possible reason for this message is that DB2 used an incorrect locale default value specified at installation time. Because locales are dynamic, they can be added, created, or deleted at anytime. DB2 does not validate the value of the locale until it is used. Therefore, it is possible to specify a locale that is not valid at installation time.

For information about locales and their naming conventions, see *z/OS C/C++ Programming Guide*

SQLSTATE: 42708

| -240 | THE PARTITION CLAUSE OF A LOCK TABLE STATEMENT IS INVALID |

Explanation: The LOCK TABLE statement is invalid for one of the following reasons:

- If it is partitioned, specify a PARTITION clause that identifies the partition you want to lock.

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.

SQLSTATE: 428B4

| -242 | THE OBJECT NAMED *object-name* OF TYPE *object-type* WAS SPECIFIED MORE THAN ONCE IN THE LIST OF OBJECTS, OR THE NAME IS THE SAME AS AN EXISTING OBJECT |

Explanation: In a list of object names of type *object-type*, the object named *object-name* was specified more than once, or is the same as an existing name of that type.

System action: The statement cannot be processed.

User response: Correct the error by removing all of the duplicate occurrences of the object from the list.

SQLSTATE: 42713

| -243 | SENSITIVE CURSOR *cursor-name* CANNOT BE DEFINED FOR THE SPECIFIED SELECT STATEMENT |

Explanation: The cursor *cursor-name* is defined as SENSITIVE, but the content of the SELECT statement makes the cursor read-only. In most cases the SELECT statement requires DB2 to build a temporary table or work file with the result table of the cursor, and DB2 cannot guarantee that changes made outside the cursor will be visible. In this case, the cursor must be defined INSENSITIVE or ASENSITIVE.

System action: The statement cannot be processed.

Programmer response: Either change the content of the query to result in a result table that is not read-only, or change the type of cursor to be INSENSITIVE or ASENSITIVE.

SQLSTATE: 36001

| -244 | SENSITIVITY *sensitivity* SPECIFIED ON THE FETCH IS NOT VALID FOR CURSOR *cursor-name* |

Explanation: The sensitivity option specified on FETCH conflicts with the sensitivity option in effect for cursor *cursor-name*. If a cursor is declared INSENSITIVE, the FETCH statement can only specify INSENSITIVE or nothing. If a cursor is declared SENSITIVE, the FETCH statement can specify INSENSITIVE, SENSITIVE, or nothing.

The keyword INSENSITIVE is not allowed with the FETCH statements if the associated cursor is either:

- Declared as SENSITIVE DYNAMIC SCROLL, or
- The cursor is declared ASENSITIVE, and DB2 selected the maximum allowable sensitivity of SENSITIVE DYNAMIC SCROLL for the associated SELECT statement.

In the case of a non-scrollable cursor, the sensitivity option cannot be specified.

sensitivity
Specified sensitivity for the FETCH statement.

cursor-name
Name of the cursor used for the FETCH statement.

System action: The statement cannot be processed.

Programmer response: Change or remove the sensitivity option that is specified on the FETCH.

SQLSTATE: 428F4

-245 **THE INVOCATION OF FUNCTION** *routine-name* **IS AMBIGUOUS**

Explanation: DB2 was not able to resolve the indicated function.

routine-name
The name of the function.

This occurs when an untyped parameter marker is passed to a function and there are two or more possible candidate functions to resolve to during function resolution.

System action: The statement is not processed.

Programmer response: Correct the problem and reissue the statement. You might need to change the SQL statement, the definition of a function, or the user's SQL path.

SQLSTATE: 428F5

Related concepts

➯ How DB2 resolves functions (Application programming and SQL)

-246 **STATEMENT USING CURSOR** *cursor-name* **SPECIFIED NUMBER OF ROWS** *num-rows* **WHICH IS NOT VALID WITH** *dimension*

Explanation:

A multiple-row FETCH, MERGE, or INSERT statement is not valid in this context. The statement is invalid because the number of rows that were specified is not greater than 0 and not less than or equal to 32767. The statement can also be invalid if the number of rows that were specified is greater than the dimension of the host variable array. The number of rows that were specified is *num-rows*, and the dimension of the array is *dimension*. If this is a FETCH statement, the cursor name is *cursor-name*. Otherwise, the *N is returned for cursor-name because the cursor name is not applicable.

System action: The statement cannot be processed. The cursor position is unchanged.

Programmer response: Change the application to either declare, or allocate a host-variable-array that is large enough to contain the number of rows specified in the statement, or update the value of *num-rows* to a value within the valid range.

SQLSTATE: 42873

-247 **A HOLE WAS DETECTED ON A MULTIPLE ROW FETCH STATEMENT USING CURSOR** *cursor-name*, **BUT INDICATOR VARIABLES WERE NOT PROVIDED TO DETECT THE CONDITION**

Explanation: A hole was detected on a FETCH statement for multiple rows of data, but no indicator variables were provided to reflect the situation to the application.

System action: The statement cannot be processed.

Programmer response: Change the FETCH statement to provide at least one indicator variable, and resubmit the statement.

SQLSTATE: 24519

-248 **A POSITIONED DELETE OR UPDATE STATEMENT FOR CURSOR** *cursor-name* **SPECIFIED ROW** *n* **OF A ROWSET, BUT THE ROW IS NOT CONTAINED WITHIN THE CURRENT ROWSET**

Explanation: The FOR ROW *n* OF ROWSET clause was specified on a positioned DELETE or UPDATE statement, but row *n* is not contained within the bound of the rowset. This situation can also occur when row *n* is within the bounds of the rowset that was requested, but the current rowset contains less than the requested number of rows. In this case, a partial rowset is returned. A partial rowset can occur for various reasons, including an end of data condition or an error that did not result in the closure of the cursor.

System action: The statement cannot be processed.

Programmer response: Reissue the positioned UPDATE or DELETE with a value that corresponds to a row of the current rowset. If the row that is specified is outside of the current rowset, then do the following:

- Use the FOR *n* ROWS clause on a FETCH CURRENT ROWSET statement to specify that the rowset contains a larger number of rows

- Reissue the positioned UPDATE or DELETE statement.

If this message is issued because a partial rowset was returned,

- Update the application logic to detect that the actual rowset size was less than the rowset size that was requested
- Ensure that a positioned UPDATE or DELETE statement only refers to rows of the current rowset.

SQLSTATE: 24521

-249 **DEFINITION OF ROWSET ACCESS FOR CURSOR** *cursor-name* **IS INCONSISTENT WITH THE FETCH ORIENTATION CLAUSE** *clause* **SPECIFIED**

Explanation: A *clause* specified for the FETCH statement is inconsistent with the definition of the cursor *cursor-name*. This error can be issued for the following situations:

- A cursor defined WITHOUT ROWSET POSITIONING can only use BEFORE, AFTER, row positioned fetch orientation keywords: NEXT, PRIOR, FIRST, LAST, CURRENT, ABSOLUTE, or RELATIVE.
- A cursor defined WITH ROWSET POSITIONING can use BEFORE, AFTER, rowset positioned fetch orientation clauses: NEXT ROWSET, PRIOR ROWSET, FIRST ROWSET, LAST ROWSET, CURRENT ROWSET, or ROWSET STARTING AT, or, row positioned fetch orientation keywords: NEXT, PRIOR, FIRST, LAST, CURRENT, ABSOLUTE, or RELATIVE.

A FOR n ROWS clause was specified on a FETCH statement, but the cursor is not defined for rowset access.

System action: The statement cannot be processed.

Programmer response: Correct the fetch orientation, remove the FOR n ROWS clause, or redefine the cursor.

SQLSTATE: 24523

-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.

SQLSTATE: 42718

-251 **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.

SQLSTATE: 42602

-253 **A NON-ATOMIC** *statement* **STATEMENT SUCCESSFULLY COMPLETED FOR SOME OF THE REQUESTED ROWS, POSSIBLY WITH WARNINGS, AND ONE OR MORE ERRORS**

Explanation: A non-atomic *statement* statement successfully processed some of the rows of data that were requested. However, one or more error conditions occurred, and some warnings might have also occurred. Use GET DIAGNOSTICS to obtain information about the error and warning conditions that occurred.

System action: One or more rows were successfully processed, but one or more errors or warnings also occurred.

Programmer response: Analyze the error and warning conditions to determine if the statement should be rolled back.

SQLSTATE: 22529

-254 **A NON-ATOMIC** *statement* **STATEMENT ATTEMPTED TO PROCESS MULTIPLE ROWS OF DATA, BUT ERRORS OCCURRED**

Explanation: A non-atomic *statement* statement specified that multiple rows of data were to be processed, but errors occurred during the processing of those rows of data. Use GET DIAGNOSTICS to obtain information about the error and warning conditions that occurred.

System action: The statement cannot be processed.

Programmer response: Analyze the error and warning conditions to determine the appropriate corrective actions.

SQLSTATE: 22530

-270 **FUNCTION NOT SUPPORTED**

Explanation: The statement cannot be processed because it violates one or more of the following restrictions:

ALTER INDEX or CREATE INDEX statements

- A CREATE INDEX or ALTER INDEX statement must not specify PADDED for an XML index, or if the index is on a VARBINARY column.

  For CREATE INDEX or ALTER INDEX statements, specify NOT PADDED for a VARBINARY column.
- A CREATE INDEX statement must not specify ASC, DESC, or RANDOM for an XML index.
- A CREATE INDEX statement must not specify DESC or RANDOM if the index is an index on expression.

  Remove the keyword DESC or RANDOM from the CREATE INDEX statement.
- A CREATE INDEX statement must not specify a BINARY or VARBINARY column in a partitioning key.
- A CREATE INDEX statement must specify DEFINE NO for an XML index.
- A CREATE INDEX statement must specify DEFER YES for a spatial index.
- A CREATE INDEX statement must not specify the name of a declared global temporary table.
- A column can have one spatial index only.
- When a spatial index is created on a column of BLOB or distinct type on BLOB, the LOB table space that stores the BLOB column must exist.
- A spatial index cannot be altered.
- The internal limit of 30 000 bytes for the versioned object descriptor (OBD) has been exceeded. This condition can happen when an ALTER INDEX statement resulted in a new index version.

ALTER TABLE or CREATE TABLE statements

- An ALTER TABLE statement must not attempt to alter a VARBINARY column to BINARY if that column is part of a unique index.
- An ALTER TABLE statement must not specify a materialized query table in an ADD CLONE clause.

  Alter the materialized query table into a base table before performing the alteration.
- An ALTER TABLE or CREATE TABLE statement must not specify a BINARY or VARBINARY column in a partitioning key.
- An ALTER TABLE ALTER COLUMN SET DATA TYPE statement must not specify VARBINARY or BINARY for the new data type when the column is a partitioning key column and the existing data type is CHAR or VARCHAR FOR BIT DATA.

- A materialized query table cannot be cloned for ALTER TABLE.
- The result table of the fullselect in the *as-result-table* clause of a CREATE TABLE statement includes data that is encoded with different CCSID sets. The result table must not use multiple CCSID sets.
- The internal limit of 30 000 bytes for the versioned object descriptor (OBD) has been exceeded. This condition can happen when an ALTER table statement:
  - Results in a new table version.
  - Is executed on a versioned table.
  - Results in a new index version.

CREATE VIEW or ALTER VIEW REGENERATE statements

- All of the views and SQL functions that are referenced in a view definition must have the same rounding mode as the view that is being defined. SQL functions that have undefined rounding mode information are ignored during rounding mode checking.

DECLARE GLOBAL TEMPORARY TABLE statements

- The result table of the fullselect in the *as-result-table* clause of a DECLARE GLOBAL TEMPORARY TABLE statement includes data that is encoded with different CCSID sets. The result table must not use multiple CCSID sets.
- The IMPLICITLY HIDDEN clause must not be specified for a column defined as a ROWID, or a distinct type that is based on a ROWID.
- A BINARY or VARBINARY column cannot be specified in a partitioning key.

FETCH statements

- A FETCH statement cannot include WITH CONTINUE or CURRENT CONTINUE within an SQL routine.

GET DIAGNOSTICS statements

- The STACKED keyword cannot be specified for a GET DIAGNOSTICS statement in an external SQL routine. The STACKED keyword is only supported within a native SQL routine.

TRIGGER statements

- A CREATE TRIGGER statement must not specify a view that has a column that is a ROWID, LOB, or XML (or a distinct type that is defined as one of these types), or a column that is defined (directly or indirectly) as an identity column, a security label column, a row change timestamp

column, an expression, or a column of a result table that involves a set operator.

- The transition variable specified does not support XML.
- If a BEFORE UPDATE TRIGGER statement contains a SET clause for one or more columns that participate in the access path index, execution of the BEFORE UPDATE TRIGGER statement could cause the row to qualify again. This situation occurs when all of the following conditions are met:
  - DB2 is using an index access path is to locate rows that qualify for update.
  - A BEFORE TRIGGER exists on the table to which the rows belong.
  - The BEFORE TRIGGER updates the values of one or more columns that participate in the access path index.

This situation can happen with both searched updates and positioned updates (updates that use the statement UPDATE WHERE CURRENT OF CURSOR). This code is issued for statements that are susceptible to this problem, even if the data involved in the update would not cause requalification.

Other restrictions

- Views and SQL functions that are referenced in an SQL statement must have the same rounding mode as the SQL statement. Views and SQL functions that have undefined rounding mode information are ignored during rounding mode checking.
- In a subselect, the select list cannot contain an XML column if OLD TABLE is specified.
- The RID built-in function, ROW CHANGE TIMESTAMP expression, and ROW CHANGE TOKEN expression must not be specified in a subselect when that subselect directly includes a LEFT OUTER JOIN, RIGHT OUTER JOIN, or FULL OUTER JOIN operator.

System action: The statement is not processed.

Programmer response: Correct the syntax, and resubmit the statement.

Error caused by XML data type

If this error is caused by an XML data type, input the XML data to one of the functions that accept XML input. Store the output of the function in the database, or return it to the application.

Error caused by rounding mode

If this error is caused by a view or SQL function that has a different rounding mode than the referencing SQL statement, then change the SQL statement or change the rounding mode in effect to make sure all the view or SQL functions referenced have the same rounding mode as the SQL statement. It is possible that a new view, SQL function, or both, are needed to match the rounding mode of the SQL statement.

If this error is caused by a view or SQL function that has a different rounding mode than the referencing view during execution of CREATE VIEW, then change the view definition or change the rounding mode in effect to make sure all the views or SQL functions referenced have the same rounding mode as the referencing view. It is possible that new a view, SQL function, or both, are needed to match the rounding mode of the referencing view.

If this error is caused by a view or SQL function that has a different rounding mode than the referencing view during execution of ALTER VIEW REGENERATE, then change the rounding mode in effect to make sure all the views or SQL functions referenced have the same rounding mode as the referencing view. It is possible the view for ALTER VIEW REGENERATE will always fail, in which case you will need to drop and recreate with a different view definition that references a new view or SQL function.

Error caused by requalification of data

If the problem is caused by requalification of data that was set by a BEFORE UPDATE TRIGGER statement, you can either:

- Ensure that the columns that are modified by the trigger are also modified by the UPDATE statement itself. Modify the UPDATE statement to include a dummy clause of the type *column-name=column-name* for each column that the BEFORE UPDATE TRIGGER modifies.
- Rebind with hints, to cause RIDLIST access path through the same index.

SQLSTATE: 42997

Related reference

↪ Statements (DB2 SQL)

-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.

SQLSTATE: 22024

-301   **THE VALUE OF INPUT HOST VARIABLE OR PARAMETER NUMBER** *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, MERGE, 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.

SQLSTATE: 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, MERGE, 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.

SQLSTATE: 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 statement with an output host variable could not be performed because the data type of a variable was not compatible with the data type of the corresponding SELECT, VALUES INTO, or SET statement list element.

position-number
    Location of the host variable value in the output SQLDA.

The values of the output host variable and the corresponding list element must be in one of the following categories:
- Both must be numbers.
- Both must be character strings, unless you are using Unicode.
- Both must be graphic strings, unless you are using Unicode.
- Both must be row IDs.
- Both must be binary strings, or one can be BINARY or VARBINARY, and the other can be FOR BIT DATA.

In addition, for datetime or timestamp values, the host variable must be a character string variable with a correct length.

System action: The statement was not executed. No data is retrieved.

Programmer response: Verify that table definitions are current and that the host variable has the correct data type.

SQLSTATE: 42806

-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 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.

SQLSTATE: 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 aggregate functions whose result table could be empty.

SQLSTATE: 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.

SQLSTATE: 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 a FETCH, INSERT, UPDATE, MERGE, DELETE, SELECT, VALUES INTO, or SET assignment 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 processed.

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

SQLSTATE: 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.

SQLSTATE: 22501

-312 **VARIABLE** *variable-name* **IS NOT DEFINED OR NOT USABLE**

Explanation: A variable is referenced in the SQL statement, but it either is not defined or cannot be used.

variable-name
> The name of the variable that is referenced in the statement.

One of the following conditions exists:

- The variable is not declared.
- The attributes of the variable are inconsistent with its usage in the SQL statement.
- The host variable was specified in a dynamic SQL statement. Host variables are not valid in dynamic SQL statements.
- A host variable array is used in a context in which it is unsupported.
- The variable appeared in one of the triggered SQL statements in a CREATE TRIGGER statement. An OLD transition variable cannot be modified in a trigger body.
- The variable name is used in the body of an SQL procedure (CREATE or ALTER PROCEDURE statement), but the variable is not declared as an SQL variable or parameter. The scope of the SQL variable is the compound statement that contains the declaration, including any compound statements that are nested within that compound statement.
- The variable appeared in one of the key-expressions of an index definition.

System action: The statement cannot be processed.

Programmer response: Do one of the following solutions and try the request again:

- Verify that the program or SQL routine contains a declaration for the variable. Verify that the variable name in the SQL statement is spelled correctly.
- Verify that the attributes of the variable are compatible with its use in the statement.
- Use parameter markers in a dynamic SQL statement instead of host variables.
- Specify a NEW transition variable when the variable is modified in a trigger.
- Declare the variable as an SQL variable or parameter in the SQL procedure.
- Check the definition of the index and remove any host variables that are specified.

SQLSTATE: 42618

Related concepts

▸ Host-variable-arrays in PL/I, C, C++, and COBOL (DB2 SQL)

-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 DESCRIBE INPUT SQL statement can be used to determine the expected number of input parameter markers.

SQLSTATE: 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.

SQLSTATE: 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.

SQLSTATE: 22525

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

Explanation: AN error occurred during the processing of a string, or in the conversion of a string. 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** | Conversion 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 or sqldbchar 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*:

| **8** | Extend the maximum length of the host variable to allow for the expansion that occurs when the string is converted.

| **12** | Change the convert table to accept the *code-point* or the data to eliminate the *code-point*.

| **16** | If the string is described as MIXED data, change its description or change the string to conform to the rules for well-formed mixed data.

| **20** | Correct the conversion procedure.

| **24** | Delete the SBCS character from the graphic string.

SQLSTATE: 22021

| **-331** | **CHARACTER CONVERSION CANNOT BE PERFORMED BECAUSE A STRING, POSITION** *position-number*, **CANNOT BE CONVERTED FROM** *source-ccsid* **TO** *target-ccsid*, **REASON** *reason-code*

Explanation: The operation required the conversion from *source-ccsid* to *target-ccsid* and a conversion error occurred. The type of error is indicated by the *reason-code*:

- 8 for length exception (for example, expansion required for PC MIXED data exceeds the maximum length of the string).
- 12 for invalid *code-point* (for example, use of the ERRORBYTE option of SYSSTRINGS).
- 16 for form exception (for example, invalid MIXED data).
- 20 for conversion procedure error (for example, an exit set the length control field of the string to an invalid value). You can find the procedure name in SYSIBM.SYSSTRINGS row with INCCSID=*source-ccsid* and OUTCCSID=*target-ccsid* in the TRANSPROC column.

The *position-number*, if provided (non-zero), is the ordinality of the output variable in the SQLDA.

System action: The statement cannot be executed.

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

| **8** | Extend the maximum length of the result column to allow for the expansion that occurs when the string is converted.

| **12** | Change the conversion table to accept the *code-point*, or change the data to eliminate the *code-point*.

| **16** | If the string is described as MIXED data, change its description or change the string to conform to the rules for well-formed MIXED data.

| **20** | Correct the conversion procedure.

An alternative to these corrective actions is to provide an indicator variable so that a null value and a warning can be returned rather than an error. Refer to chapter 2 of *SQL Reference* for more information on coded character set.

SQLSTATE: 22021

| **-332** | **CHARACTER CONVERSION BETWEEN CCSID** *from-ccsid* **TO** *to-ccsid* **REQUESTED BY** *reason-code* **IS NOT SUPPORTED**

Explanation: The operation required a conversion

between two different CCSIDs, but no conversion support was found.

This error may occur if one CCSID is 65535 (BIT data) and the other CCSID is a graphic CCSID. Conversion is not defined between 65535 and a graphic CCSID.

from-ccsid
Identifies the coded character set of the string to be converted.

to-ccsid Identifies the coded character set to which it must be converted.

reason code
Describes the reason codes returned from DB2. Reason codes returned from DB2 begin with 'DSN' and identify the context in which the conversion was requested. Values other than those that start with 'DSN' are returned from other DB2 platforms and are described in the documentation for the platform.

System action: The statement cannot be processed.

Programmer response: If the conversion request is correct, refer to the section entitled "Character conversion" in *Installation Guide* for information on how to add conversion support.

SQLSTATE: 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 CHARACTER CONVERSION**

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 SQLTYPE, SQLLEN and CCSID expected. Refer to chapter 2 of *SQL Reference* for more information on coded character set.

SQLSTATE: 56010

-336 **THE SCALE OF THE DECIMAL NUMBER MUST BE ZERO**

Explanation: The decimal number is used in a context where the scale must be zero. This can occur when a decimal number is specified in a CREATE or ALTER SEQUENCE statement for START WITH, INCREMENT BY, MINVALUE, MAXVALUE, or RESTART WITH.

Programmer response: Change the decimal number so that there are no non-zero digits to the right of the decimal point.

SQLSTATE: 428FA

-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

SQLSTATE: 42972

-340 **THE COMMON TABLE EXPRESSION *name* HAS THE SAME IDENTIFIER AS ANOTHER OCCURRENCE OF A COMMON TABLE EXPRESSION DEFINITION WITHIN THE SAME STATEMENT**

Explanation: The common table expression name *name* is used in the definition of more than one common table expressions in the statement. The name used to describe a common table expression must be unique within the same statement.

System action: The statement cannot be executed.

Programmer response: Correct the error by changing the name of one of the common table expressions.

SQLSTATE: 42726

-341 **A CYCLIC REFERENCE EXISTS BETWEEN THE COMMON TABLE EXPRESSIONS *name1* AND *name2***

Explanation: The common table expression *name1* refers to *name2* in a FROM clause within its fullselect and *name2* refers to *name1* in a FROM clause within its fullselects. Such forms of cyclic references are not allowed.

System action: The statement cannot be executed.

Programmer response: Remove the cyclic reference from one of the common table expressions.

SQLSTATE: 42835

-342 **THE COMMON TABLE EXPRESSION** *name* **MUST NOT USE SELECT DISTINCT AND MUST USE UNION ALL BECAUSE IT IS RECURSIVE**

Explanation: There are two possible explanations:

• A fullselect within the common table expression *name* cannot start with SELECT DISTINCT because the common table expression is recursive.

• A fullselect within the common table expression *name* specified UNION instead of UNION ALL as required for recursive common table expressions.

System action: The statement cannot be executed.

Programmer response: Remove the keyword DISTINCT from the common table expression, add the keyword ALL following UNION, or remove the recursive reference within the common table expression.

SQLSTATE: 42925

-343 **THE COLUMN NAMES ARE REQUIRED FOR THE RECURSIVE COMMON TABLE EXPRESSION** *name*

Explanation: The recursive common table expression name *name* must include the specification of the column names following the identifier of the common table expression.

System action: The statement cannot be executed.

Programmer response: Add column names following the identifier of the common table expressions.

SQLSTATE: 42908

-344 **THE RECURSIVE COMMON TABLE EXPRESSION** *name* **HAS MISMATCHED DATA TYPES OR LENGTHS OR CODE PAGE FOR COLUMN** *column-name*

Explanation: The recursive common table expression name *name* has a column *column-name* that is referred to in the iterative fullselect of the common table expression. The data type and length are set based on the initialization fullselect for this column. The result of the expression for the column *column-name* in the iterative fullselect has a different data type or length that may result in failure to assign the value for the column.

System action: The statement cannot be executed.

Programmer response: Correct the column used in the

fullselects of the recursive common table expression so that the initialization column matches the iterative columns.

SQLSTATE: 42825

-345 **THE FULLSELECT OF THE RECURSIVE COMMON TABLE EXPRESSION** *name* **MUST BE A UNION ALL AND MUST NOT INCLUDE AGGREGATE FUNCTIONS, GROUP BY CLAUSE, HAVING CLAUSE, OR AN EXPLICIT JOIN INCLUDING AN ON CLAUSE**

Explanation: The common table expression *name* includes a reference to itself and therefore:

• must be the union of two or more fullselects.

• cannot include a GROUP BY clause.

• cannot have aggregate functions.

• cannot include a HAVING clause.

• and cannot include an explicit join with an ON clause.

System action: The statement cannot be executed.

Programmer response: Change the common table expression by:

• making it a union of two or more fullselects.

• removing any aggregate functions, GROUP BY clause, HAVING clause, or explicit JOIN including an ON clause.

• removing the recursive reference.

SQLSTATE: 42836

-346 **AN INVALID REFERENCE TO COMMON TABLE EXPRESSION** *name* **OCCURS IN THE FIRST FULLSELECT, AS A SECOND OCCURRENCE IN THE SAME FROM CLAUSE, OR IN THE FROM CLAUSE OF A SUBQUERY**

Explanation: The common table expression *name* includes an invalid reference to itself as described by one of the following:

• A recursive reference in the first fullselect before the UNION ALL set operator. The first fullselect must be an initialization and cannot include a recursive reference.

• More than one reference to the same common table expression in the same FROM clause. Such references are not permitted in recursive common table expression.

• A recursive reference in the FROM clause of a subquery. A recursion cycle cannot be defined using a subquery.

System action: The statement cannot be executed.

Programmer response: Change one of the following:

- the fullselect prior to the union operator so that it does not include a recursive reference.
- the FROM clause containing more than one reference to the same common table expression to just one reference .
- the FROM clause of the subquery so that it does not reference the common table expression.

SQLSTATE: 42836

-348   *sequence-expression* **CANNOT BE SPECIFIED IN THIS CONTEXT**

Explanation: The statement contains a NEXT VALUE expression or PREVIOUS VALUE expression in an invalid context.

The NEXT VALUE expression or PREVIOUS VALUE expression cannot be specified in the following contexts:

- Join condition of a full outer join
- DEFAULT value for a column in a CREATE TABLE or ALTER TABLE statement
- Column definition that is generated in a CREATE TABLE or ALTER TABLE statement
- Materialized query table definition in a CREATE TABLE or ALTER TABLE statement
- An *as-result-table* clause of a CREATE TABLE or DECLARED GLOBAL TEMPORARY TABLE statement.
- Condition of a CHECK constraint
- Input value-specification for LOAD
- CREATE VIEW statement
- Key-expression of an index definition.
- The SELECT list of a subselect that contains a NOT ATOMIC data change statement.

The NEXT VALUE expressions cannot be specified in the following contexts:

- CASE expression
- Parameter list of an aggregate function
- Subquery in a context in which it is not otherwise allowed
- SELECT statement for which the outer SELECT contains a DISTINCT operator or a GROUP BY clause
- SELECT statement for which the outer SELECT is combined with another SELECT statement using a set operator such as UNION, EXCEPT, or INTERSECT
- Join condition of a join
- Nested table expression
- Parameter list of a table function
- SELECT clause of the fullselect of an expression in the SET clause of an UPDATE statement
- ORDER BY clause in the SELECT statement

- ORDER BY clause in an OLAP specification
- IF, WHILE, DO ... UNTIL, or CASE statement in an SQL routine
- Key-expression of an index definition.
- The SELECT list of a subselect that contains a NOT ATOMIC data change statement.

System action: The statement cannot be executed.

Programmer response: Remove the reference to the sequence expression and resubmit the statement.

SQLSTATE: 428F9

-350   *column-name* **WAS IMPLICITLY OR EXPLICITLY REFERENCED IN A CONTEXT IN WHICH IT CANNOT BE USED**

Explanation: The ALTER, CREATE, or DECLARE GLOBAL TEMPORARY TABLE statement is invalid for one of the following reasons:

- A LOB, DECFLOAT, or XML column cannot be specified as a column of the primary key in a PRIMARY KEY clause.
- A LOB, DECFLOAT, or XML column cannot be specified as a column of a UNIQUE KEY.
- A LOB, DECFLOAT, XML, or security label column cannot be specified as a column of a foreign key in a *referential-constraint* clause.
- A LOB, DECFLOAT, XML, or security label column cannot be specified as a column of a parent key in a REFERENCES clause.
- A LOB, DECFLOAT, or XML column cannot be specified as a column of a partitioning key for range partitioning.
- A LOB or XML column cannot be defined in a temporary table (created global temporary table or declared global temporary table).
- A LOB, DECFLOAT, or XML column cannot be defined in a table that has an EDITPROC.
- A LOB, DECFLOAT, or XML column cannot be specified as a column of an index key, and the result data type, including the intermediate result, of a key expression for an index cannot be a LOB, DECFLOAT, XML, or a distinct type based on a LOB or DECFLOAT data type. **Exception:** For an XML index, only XML columns can be specified, and the result type of the index key can be DECFLOAT.
- A hidden column or security label column cannot be specified in a key expression for an index.
- A ROWID, LOB, or XML data type cannot be the data type of a column in the result table of an *as-result-table* clause of a CREATE TABLE or DECLARE GLOBAL TEMPORARY TABLE statement.
- A security label column *column-name* exists in the result table of the *as-result-table* clause; however, it is

not the only security label column in that result table. A table can be defined only with a single security label column.

| • An XML column cannot be specified with the SET
| DEFAULT or DROP DEFAULT clause.

| • A VARBINARY column can not be specified as a
| column of an index key when DESC is also specified.

The same restrictions apply to a distinct type column where the base data type is subject to one of the restrictions in the list.

System action: The statement cannot be processed.

Programmer response: Correct the syntax and resubmit the statement.

SQLSTATE: 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.

SQLSTATE: 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.

SQLSTATE: 56084

| **-353**   **FETCH IS NOT ALLOWED, BECAUSE
| CURSOR** *cursor-name* **HAS AN
| UNKNOWN POSITION**

| **Explanation:** The cursor position for *cursor-name* is
| unknown. The previous multiple-row-fetch for cursor
| *cursor-name* resulted in an error in the middle of

processing multiple rows that were retrieved from DB2. One or more of the requested rows could not be returned to the program following the error, leaving the position of the cursor unknown.

The error might have been detected at the requester. For example, a row with a null value was returned to an application, but no indicator variable was provided. A subsequent FETCH statement would result in SQLCODE -353. If an indicator had been provided, a positive SQLCODE would have been returned and all of the rows retrieved from DB2 could have been returned to the application program.

System action: The statement cannot be processed. The cursor position is not changed.

Programmer response: Close and reopen the cursor to reset the cursor position. For scrollable cursors, you can change the FETCH statement to specify one of the other fetch orientations. For example, you can modify the FETCH statement by specifying one of the following fetch orientations:

• BEFORE or AFTER

• row-positioned fetch orientations: FIRST, LAST, or ABSOLUTE to establish a valid row cursor and fetch a row of data

• rowset-positioned fetch orientations: FIRST ROWSET, LAST ROWSET, or ROWSET STARTING AT ABSOLUTE to establish a valid rowset cursor position and fetch multiple rows of data

Alternately, change the application to correct the error that originally occurred. For example, if the error was issued because an indicator was not provided, change the application to provide an indicator.

SQLSTATE: 24513

| **-354**   **A ROWSET FETCH STATEMENT MAY
| HAVE RETURNED ONE OR MORE
| ROWS OF DATA. HOWEVER, ONE OR
| MORE NON-TERMINATING ERROR
| CONDITIONS WERE ENCOUNTERED.
| USE THE GET DIAGNOSTICS
| STATEMENT FOR MORE
| INFORMATION REGARDING THE
| CONDITIONS THAT WERE
| ENCOUNTERED**

Explanation: A rowset FETCH statement encountered one or more non-terminating error conditions. One or more warnings might also have been encountered. Use the GET DIAGNOSTICS statement to obtain information about the conditions that occurred, and to determine if data was returned. It is possible that one or more rows of data were returned. In cases where the row information returned for the row that encountered the condition is incomplete, use of the data for the row that encountered the condition, such as displaying or printing the data, is not recommended.

System action: DB2 processed the statement successfully, but with at least one non-terminating error. Additionally, the fetching of some rows might have encountered warnings.

Programmer response: Analyze the conditions to determine whether follow-up actions are needed. The GET DIAGNOSTICS statement can be used to determine which additional actions might be necessary.

Attention: It is possible that an end of data condition was detected. SQLERRD3 and GET DIAGNOSTICS can be used to determine if all the requested rows were fetched or if a partial rowset was returned.

SQLSTATE: 22537

-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 DBCLOB 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 LOB table space stores a BLOB or CLOB column whose length exceeds 1 gigabyte or a DBCLOB 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.

SQLSTATE: 42993

-356	KEY EXPRESSION *key-expr-num* IS NOT VALID, REASON CODE = *reason-code*

Explanation: The CREATE INDEX statement cannot be executed because key expression number *key-expr-num* is not valid for one of the following possible reason codes: has one of the following problems:

1	Contains a subquery
2	Does not contain at least one reference to a column
3	References a special register
4	Includes a CASE expression
5	Includes a user-defined function
6	Appears more than once in the index
7	References a qualified column name
8	References a column that is defined with a FIELDPROC

9	References the LOWER or UPPER function without a locale name or the input string-expression is FOR BIT DATA
10	References the TRANSLATE function without an output translation table
11	The CCSID encoding scheme of the result of a key-expression is different than the CCSID encoding scheme of the table

System action: The statement cannot be executed.

Programmer response: Correct the error in the key expression.

SQLSTATE: 429BX

-359	THE RANGE OF VALUES FOR THE IDENTITY COLUMN OR SEQUENCE IS EXHAUSTED

Explanation: DB2 attempted to generate a value for an identity column or a sequence object. However, all allowable values have already been assigned.

System action: The statement cannot be processed.

Programmer response: Take one of the following actions:

- For an identity column, redefine the table with a larger range of values for the identity column. If a MAXVALUE or MINVALUE specification has been made that limits the range of values to be less than the range for the data type of the column, then the column can be altered to expand the range of valid values. Otherwise, the identity column must be recreated, which requires that the table be recreated. First, drop the existing table; then, recreate the table with a different data type for the identity column, specifying a data type that has a larger range of values than the current data type for the identity column.
- For a sequence object, redefine the sequence with a larger range of values. If a MAXVALUE or MINVALUE specification has been made that limits the range of values to be less than the range for the data type, then the sequence can be altered to expand the range of valid values. Otherwise, the sequence must be recreated using DROP SEQUENCE and CREATE SEQUENCE to cover a larger range of values.

SQLSTATE: 23522

-372	ONLY ONE ROWID, IDENTITY, OR SECURITY LABEL COLUMN IS ALLOWED IN A TABLE

Explanation: One of the following actions was attempted:

- 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.
| • Add a security label column to a table that already has one.
| • Create a table with more than one security label column.
| • Create a table without a security label in the Common Criteria environment which requires a security label column on every table created.

| **System action:** The statement was not processed.

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

| If the Common Criteria environment is set (DSN6SPRM COMCRIT= YES), then every table created must have a security label. Designate a column AS SECURITY LABEL or change the subsystem parameter.

| **SQLSTATE:** 428C1

-373 **DEFAULT CANNOT BE SPECIFIED FOR COLUMN OR SQL VARIABLE** *name*

Explanation: The definition or change specified for column or SQL variable *name* specified DEFAULT. DEFAULT is not supported for data type of the column definition or SQL variable declaration.

DEFAULT is not allowed in this context for one of the following reasons:

- A CREATE or ALTER TABLE statement attempted to define an identity column, ROWID column, XML column, row change timestamp column, or security label column with the DEFAULT clause specified.
- The declaration of an SQL variable specified the DEFAULT clause and the data type of the SQL variable is a ROWID or XML.
- A SET statement specified DEFAULT for the value of a ROWID column *n*.

System action: The statement cannot be processed.

Programmer response: Remove the DEFAULT keyword or clause, and reissue the failing statement.

SQLSTATE: 42623

| **-374** **THE CLAUSE** *clause* **HAS NOT BEEN SPECIFIED IN THE CREATE OR ALTER FUNCTION STATEMENT FOR LANGUAGE SQL FUNCTION** *function-name* **BUT AN EXAMINATION OF THE FUNCTION BODY REVEALS THAT IT SHOULD BE SPECIFIED**

| **Explanation:** This message might be issued if the following conditions apply:
| • You must specify NOT DETERMINISTIC if either of the following conditions apply within the body of the function:
| – DB2 invokes a function that has the NOT DETERMINISTIC attribute specified.
| – DB2 accesses a special register.
| • You must specify MODIFIES SQL DATA if the body of the function defined with LANGUAGE SQL can modify SQL data or if it calls a function or a procedure that can modify SQL data.
| • You must specify READS SQL DATA if the body of the function defined with LANGUAGE SQL contains a subselect, or if it invokes a function that can read SQL data.
| • You must specify EXTERNAL ACTION if the body of the function defined with LANGUAGE SQL invokes a function that has the EXTERNAL ACTION attribute specified.

| **System action:** The statement cannot be executed.

| **Programmer response:** Specify the correct clause or change the function of the body.

| **SQLSTATE:** 428C2

| **-390** **THE FUNCTION** *function-name*, **SPECIFIC NAME** *specific-name*, **IS NOT VALID IN THE CONTEXT WHERE IT IS USED**

| **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 aggregate 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 aggregate function is allowed (such as in an expression, or in a SOURCE clause of a CREATE FUNCTION statement).
| • Function SYSFUN.DSN_XMLVALIDATE invoked outside of the required context of the first argument to function XMLPARSE, or an option other than STRIP WHITESPACE was specified. In this case, the *specific-name* token is an empty string.

| **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 2 of *SQL Reference* for information on the use of functions.

SQLSTATE: 42887

-392 **SQLDA PROVIDED FOR CURSOR** *cursor-name* **HAS BEEN CHANGED FROM THE PREVIOUS FETCH**

Explanation: The application is running with DB2 rules, and has requested that LOB data be returned as a LOB in one FETCH statement, and as a locator in another FETCH statement. This request is not permitted.

cursor-name
    The name of the cursor.

System action: The statement is not processed, and the connection is terminated.

Programmer response: Either do not use DB2 rules, or modify the application so that it does not change the data type code from LOB to locator (or the reverse) in the SQLDA between successive fetches.

SQLSTATE: 42855

Related concepts

➡ CURRENT RULES (DB2 SQL)

-393 **THE CONDITION OR CONNECTION NUMBER IS INVALID**

Explanation: The value of the CONDITION or CONNECTION number that was specified in the GET DIAGNOSTICS statement is either less than zero, or greater than the number of available diagnostics.

System action: The statement cannot be processed.

Programmer response: Correct the value of the CONDITION or CONNECTION number, while ensuring that the number is between 1 and the value of the NUMBER statement-information item or GET DIAGNOSTICS. Resubmit the GET DIAGNOSTICS CONDITION or GET DIAGNOSTICS CONNECTION statement.

SQLSTATE: 35000

-396 *object-type object-name* **ATTEMPTED TO EXECUTE AN SQL STATEMENT DURING FINAL CALL PROCESSING**

Explanation: A user-defined function named *object-name* was invoked and attempted to execute an

SQL statement (other than CLOSE CURSOR) during final call processing, but the statement is not allowed.

System action: The SQL statement cannot be executed.

Programmer response: Change the definition of the function to not issue SQL statements during final call processing.

SQLSTATE: 38505

-397 **GENERATED IS SPECIFIED AS PART OF A COLUMN DEFINITION, BUT IT IS NOT VALID FOR THE DEFINITION OF THE COLUMN**

Explanation: GENERATED was specified in a CREATE or ALTER TABLE statement for a column with a data type that is not a row ID, a distinct type that is based on a row ID, a row change timestamp, or an identity column. GENERATED can only be specified for a column with a data type of row ID, a distinct type that is based on a row ID, a row change timestamp, or an identity column.

System action: The statement cannot be processed.

Programmer response: Correct the statement. Either eliminate the GENERATED clause or change the definition of the column to one of the types that can be generated.

SQLSTATE: 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.

SQLSTATE: 428D2

-399 **INVALID VALUE ROWID WAS SPECIFIED**

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 statement cannot be executed.

System programmer response: Do not attempt to generate any value 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.

You could also use the OVERRIDING clause as a possible solution for this situation. See INSERT in DB2 SQL Reference for more information about the OVERRIDING USER VALUE clause.

SQLSTATE: 22511

-400   THE CATALOG HAS THE MAXIMUM NUMBER OF USER DEFINED INDEXES

Explanation: No more than 500 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.

SQLSTATE: 54027

-401   THE OPERANDS OF AN ARITHMETIC OR COMPARISON OPERATION ARE NOT COMPARABLE

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 a field procedure exists on one of the columns. If one column of arithmetic or comparison operation is defined with a field procedure, other columns in the operation must be defined with the same field procedure.

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.

SQLSTATE: 42818

-402   AN ARITHMETIC FUNCTION OR OPERATOR *function-operator* **IS APPLIED TO CHARACTER OR DATETIME DATA**

Explanation: A nonnumeric operand has been specified for the arithmetic function or operator.

function-operator
        The name of the arithmetic function or operator.

System action: The statement was not executed.

Programmer response: Examine and correct the syntax of the SQL statement so that all operands of the specified function or operator are numeric.

SQLSTATE: 42819

-404   THE SQL STATEMENT SPECIFIES A STRING THAT IS TOO LONG

Explanation: An INSERT, UPDATE, MERGE, 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 target column or index key.

System action: The statement cannot be executed.

Programmer response:

Check the length of the target column, parameter, host variable, transition variable, or index key 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.

SQLSTATE: 22001

-405   THE NUMERIC CONSTANT *constant* **CANNOT BE USED AS SPECIFIED BECAUSE IT IS OUT OF RANGE**

Explanation:

The numeric *constant* 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
- $-9.999999999999999 \times 10^{-383}$ to $9.999999999999999 \times 10^{384}$ for DECFLOAT(16) values
- $-9.999999999999999999999999999999999 \times 10^{-6143}$ to $9.999999999999999999999999999999999 \times 10^{6144}$ for DECFLOAT(34) values
- - 9223372036854775808 to +9223372036854775807 for big integer (BIGINT) values

System action: The statement cannot be executed.

Programmer response: The value of *constant* should be reduced to the appropriate size for this data type.

SQLSTATE: 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 for one of the following reasons:

- The values occurring in the object column were out of range.
- The SQL operation performed was not appropriate for the values in the object column.
- A DECIMAL(19,0) column is altered to BIGINT, but a value in the column is outside the range of BIGINT. Refer to the ALTER TABLE description in *SQL Reference* for more information.

System action: The statement cannot be executed.

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

If the error occurred while accessing a table column that was altered from DECIMAL(19,0) to BIGINT, change the column back to DECIMAL(19,0) and refer to the ALTER TABLE description in *SQL Reference* on how to properly prepare for changing DECIMAL(19,0) column to BIGINT.

SQLSTATE: 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.
- A SET transition variable statement specified a NULL value for column defined as NOT NULL without the WITH DEFAULT clause in the table definition.
- The update or 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.
  - An update cannot set default values of NULL in that column.
  - A SET transition variable statement in a trigger cannot set default values of NULL in that column.
- The column name list for the INSERT statement omits a column declared NOT NULL and without WITH DEFAULT in the table definition.

- The view for the INSERT statement omits a column declared NOT NULL and without WITH DEFAULT in the base table definition.
- 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.

SQLSTATE: 23502

-408 THE VALUE IS NOT COMPATIBLE WITH THE DATA TYPE OF ITS TARGET. TARGET NAME IS *name*

Explanation: A statement failed required assignment rule checking.

name The name of the target of the assignment.

The data type that is to be assigned is incompatible with the declared data type of the assignment target. Both data types must be:

- Numeric
- Character (see restriction)
- Graphic (see restriction)
- Dates or character (see restriction)
- Times or character (see restriction)
- Timestamps or character (see restriction)
- Row IDs
- The same distinct types
- XML
- Result set locator
- Table locator

Restrictions:

- Dates, times, and timestamps cannot be assigned to a character column that has a field procedure.
- Character and graphic data types are compatible when using Unicode.

System action: The statement cannot be processed.

Programmer response: Examine the current definition for the object table, procedure, user-defined function, host variable, or SQL variable, and ensure that the variable, constant, or result of an expression that is assigned to the object has the proper data type. In some cases, you can convert the value to the proper data type by using a function such as CHAR or DECIMAL.

If the target is a result set locator, the application might have tried to explicitly assign an invalid locator value

to a result set locator. Use the ASSOCIATE LOCATORS statement to get a valid locator value for a result set into a locator variable. Then, reference the result set locator in an ALLOCATE CURSOR statement.

SQLSTATE: 42821

-409   **INVALID OPERAND OF A COUNT FUNCTION**

Explanation: The operand of the COUNT or COUNT_BIG function in the statement violates SQL syntax. A common error is a column name or other expression without DISTINCT.

System action: The statement cannot be executed.

Programmer response: Correct the syntax and resubmit the statement. Refer to Chapter 3 of *SQL Reference* for information about the proper form for the operands of a COUNT or COUNT_BIG function.

SQLSTATE: 42607

-410   **A NUMERIC VALUE *value* IS TOO LONG, OR IT HAS A VALUE THAT IS NOT WITHIN THE RANGE OF ITS DATA TYPE**

Explanation: The specified value is too long. A floating-point string has a maximum length of 30 characters. A decimal floating-point string has a maximum length of 42 characters.

System action: The statement cannot be executed.

Programmer response:

Correct the indicated string value.

SQLSTATE: 42820

-411   **CURRENT SQLID CANNOT BE USED IN A STATEMENT THAT REFERENCES REMOTE OBJECTS**

Explanation: A reference to the CURRENT SQLID special register is invalid in a statement that contains the three-part name or alias of an object that is remote to the remote server.

System action: The statement cannot be processed.

Programmer response: Remove either the reference to CURRENT SQLID or the reference to the remote object.

SQLSTATE: 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 4 of *SQL Reference* for information about restrictions on the syntax for subqueries.

SQLSTATE: 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.

SQLSTATE: 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, graphic string, or binary string.

System action: The statement cannot be executed.

Programmer response: Specify the predicate so that the data type of each operand is a character string or a graphic string.

SQLSTATE: 42824

-415   **THE CORRESPONDING COLUMNS, *column-number*, OF THE OPERANDS OF A SET OPERATOR ARE NOT COMPATIBLE**

Explanation: The data types of the corresponding columns of a UNION, EXCEPT, or INTERSECT set operator are not compatible, or the corresponding columns do not have the same field procedure. The relative position of the value in the select list is *column-number*. Refer to *SQL Reference* for the rules about data type compatibility.

This error is issued if one of the columns is a distinct type, and the other column is not a distinct type, or the other column is a different distinct type. This error code is also issued if one column is defined with a field procedure, and the other column is not defined with the same field procedure. If corresponding columns have field procedures, they must both be defined with the same field procedure.

System action: The statement cannot be processed.

Programmer response: Check the data types of the specified columns and correct the statement containing the set operator to ensure that all corresponding columns have comparable column descriptions. A CAST specification can be used to make the data type of the columns compatible.

SQLSTATE: 42825

-416 **AN OPERAND OF A SET OPERATOR CONTAINS A LONG STRING COLUMN**

Explanation: The UNION, EXCEPT, or INTERSECT set operator that you specified in the SQL statement could not be performed because one of the tables participating in the union contains a long string column. The operands of a set operator that does not include the ALL keyword cannot contain long string columns.

System action: The statement cannot be processed.

Programmer response: The implied function is not supported by DB2. Refer to chapter 2 of *SQL Reference* for information about restrictions on the manipulation of long string columns.

SQLSTATE: 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 *SQL Reference* for information about the proper usage of parameter markers within SQL statements to be prepared.

SQLSTATE: 42609

-418 **A STATEMENT STRING TO BE PREPARED CONTAINS AN INVALID USE OF PARAMETER MARKERS**

Explanation: The statement cannot be executed because a parameter marker has been used in an invalid way.

Parameter markers cannot be used:

- In the SELECT list as the sole argument of a scalar function.
- In a concatenation operation.
- In the string expression of an EXECUTE IMMEDIATE SQL statement.
- In a key-expression of an index definition.

Untyped parameter markers cannot be used:
- As an argument to an XMLQUERY function.
- As an argument to an XMLEXISTS predicate.

System action: The statement was not executed.

Programmer response: Correct the logic of the application program so that this error does not occur. See the discussion of the PREPARE statement for information about the proper usage of parameter markers within SQL statements and for EXECUTE IMMEDIATE SQL statement restrictions.

SQLSTATE: 42610

Related reference

➡ PREPARE (DB2 SQL)

-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 *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 might have participated in a decimal division. Note that an integer or small integer value might have been converted to decimal for this calculation.

A value of YES for field MINIMUM DIVIDE SCALE on installation panel DSNTIPF specifies that the scale of the result of a decimal division is never less than 3.

SQLSTATE: 42911

-420 **THE VALUE OF A STRING ARGUMENT WAS NOT ACCEPTABLE TO THE** *function-name* **FUNCTION**

Explanation: A 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 processed.

Programmer response: Change the argument value so

that it conforms to the requirements of the function as specified in *SQL Reference*.

SQLSTATE: 22018

-421   **THE OPERANDS OF A SET OPERATOR DO NOT HAVE THE SAME NUMBER OF COLUMNS**

Explanation: The operands of a set operator, such as UNION, EXCEPT, or INTERSECT, must have the same number of columns.

System action: The statement cannot be processed.

Programmer response: Correct the SQL statement so that there are exactly the same number of columns.

SQLSTATE: 42826

-423   **INVALID VALUE FOR LOCATOR IN POSITION** *position-#*

Explanation: The value specified in a result set locator host variable, a LOB locator host variable, or a table locator that is specified at position *position-#* in the locator variable list of the SQL statement does not identify a valid result set locator, LOB locator variable, or table locator, 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.

For a table locator, the error commonly occurs when the host variable that was used as a table locator was never assigned a valid table locator value.

SQLSTATE: 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 issuedonly 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.

SQLSTATE: 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.

SQLSTATE: 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.

SQLSTATE: 38503

-431   **ROUTINE** *routine-name* **(SPECIFIC NAME** *specific-name***) OF TYPE** *routine-type* **HAS BEEN INTERRUPTED BY THE USER**

Explanation: A user has issued TERMINATE during a debugging session of SQL routine *routine-name*. The

TERMINATE might have been issued because an infinite wait or loop was encountered.

System action: The statement cannot be processed.

User response: No recovery is necessary.

SQLSTATE: 38504

-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, or has a data type of BINARY or VARBINARY, 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.

SQLSTATE: 22001

-435 **AN INVALID SQLSTATE** *sqlstate* **IS SPECIFIED IN A RAISE_ERROR FUNCTION, RESIGNAL STATEMENT, OR SIGNAL STATEMENT**

Explanation: The SQLSTATE specified in the RAISE_ERROR function, RESIGNAL statement, or SIGNAL statement of a trigger or a routine does not conform to the rules for a valid SQLSTATE.

System action: The statement cannot be processed.

Programmer response: Change the SQLSTATE specified in the RAISE_ERROR function, RESIGNAL statement, or SIGNAL statement so that it conforms to the rules stated in *SQL Reference*.

For the RAISE_ERROR function, the SQLSTATE must be a character string containing exactly five (5) characters. It must be of type CHAR defined with a length of five (5), or, a type VARCHAR defined with a length of five (5) or greater. The SQLSTATE value must conform to the following rules:

- Each character must be from the set of digits ('0' through '9') or non-accented upper case letters ('A' through 'Z').

- The SQLSTATE class (the first two characters) cannot be '00', '01' or '02' because these characters do not indicate error classes.

- If the SQLSTATE class (the first two characters) start with the character '0' through '6' or 'A' through 'H', then the subclass (the last three characters) must start with a letter in the range 'I' through 'Z'.

- If the SQLSTATE class (the first two characters) start with the character '7', '8', '9' or 'I' through 'Z', then the subclass (the last three characters) must be from the set of characters '0' through '9' or 'A' through 'Z'.

For the RESIGNAL and SIGNAL statements, the SQLSTATE value must be exactly five (5) characters that follow the following rules:

- Each character must be from the set of digits '0' through '9' or non-accented upper case letter 'A' through 'Z'.

- The SQLSTATE class (the first two characters) cannot be '00' because it represents successful completion.

SQLSTATE: 428B3

-438 **APPLICATION RAISED ERROR WITH DIAGNOSTIC TEXT:** *text*

Explanation:

This error occurred as a result of the RAISE_ERROR function, a RESIGNAL statement, a SIGNAL SQLSTATE statement, or it was an unhandled condition when processing of the trigger or routine completed.

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.

SQLSTATE: Defined by the application

-440 **NO** *routine-type* **BY THE NAME** *routine-name* **HAVING COMPATIBLE ARGUMENTS WAS FOUND IN THE CURRENT PATH**

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 SQL 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.

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 SQL path.

SQLSTATE: 42884

-441   **INVALID USE OF 'DISTINCT' OR 'ALL' WITH FUNCTION** *function-name*

Explanation:

This error can occur for the following situations:

- 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 keywords DISTINCT or ALL with the specified scalar function is invalid.
- The keyword DISTINCT was detected within parentheses in a reference to function *function-name* and the function has been resolved as an aggregate function. Use of the keywords DISTINCT with the specified aggregate function is not valid.
- The function was expected to be an aggregate function supporting the keyword ALL or DISTINCT, but the function that was resolved to is not an aggregate function.

System action: The statement cannot be processed.

Programmer response: Take the appropriate action:

- If a scalar function is being used, then remove the keyword DISTINCT or ALL.
- If the function is an aggregate function that does not support the DISTINCT or ALL keywords, then remove the keyword.
- Otherwise, if an aggregate function is being used, then there is a problem with function resolution. Check your SQL 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

SQLSTATE: 42601

-443   **ROUTINE** *routine-name* **(SPECIFIC NAME** *specific-name*) **HAS RETURNED AN ERROR SQLSTATE WITH DIAGNOSTIC TEXT** *msg-text*

Explanation: An SQLSTATE was returned by routine *routine-name*, along with message text *msg-text*.

System action: Execution of the SQL statement is terminated.

Programmer response: Contact the author of the routine or your database administrator. Until the problem is resolved, the routine should not be used.

SQLSTATE: xxxxx (the SQLSTATE that was returned by the routine).

-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 EXTERNAL_NAME 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 EXTERNAL_NAME column value in the SYSIBM.SYSROUTINES table is incorrect, use the ALTER FUNCTION or ALTER PROCEDURE statement to correct the value.

If the EXTERNAL_NAME 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.

SQLSTATE: 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.

- For external routines with LANGUAGE JAVA, the name must be specified and it must contain a valid *external-java-routine-name* of the following form: *jar-name:package-id...class-id.method-id*(*method-signature*)

– No blanks are permitted within the single quotes.

– The *method-name* consists of the list of *package-ids*, *class-id*, and *method-id*, and must not be longer than 254 bytes.

– Zero or more *package-ids* can be specified, preceding the *class-id*.

– The *method-signature* is optional, and is a list of Java™ data types that are separated by commas. If specified, the *method-signature* must not be longer than 1024 bytes.

– If multiple strings are specified, the total length of all the strings concatenated together for the *external-java-routine-name* must not be greater than 1305.

• For external routines with a language other than JAVA, 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.

User response: When LANGUAGE is JAVA, possible causes include:

• Omitting the EXTERNAL NAME clause.

• Including a blank.

• Having the '!' at the beginning or end of the name.

• Specifying an invalid *external-java-routine-name*.

Programmer response: Correct the syntax of the SQL statement. Refer to the *SQL Reference* for information on the EXTERNAL NAME clause.

SQLSTATE: 42878

-450 **USER-DEFINED FUNCTION OR STORED PROCEDURE** *name*, **PARAMETER NUMBER** *parmnum*, **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: Execution of the SQL statement is terminated.

Programmer response: Contact the author of the function or your database administrator. Until it is fixed, the function should not be used.

SQLSTATE: 39501

-451 **THE** *data-item* **DEFINITION IN THE CREATE OR ALTER STATEMENT FOR** *routine-name* **CONTAINS DATA TYPE** *type* **WHICH IS NOT SUPPORTED FOR THE TYPE AND LANGUAGE OF THE ROUTINE**

Explanation: An error was made in the *data-item* part of the CREATE or ALTER statement for *routine-name*. The statement contained an invalid data type, or it contained a distinct type which is based on the invalid data type.

System action: The statement cannot be processed.

Programmer response: Correct the specification of the routine and reissue the CREATE statement.

SQLSTATE: 42815

-452 **UNABLE TO ACCESS THE FILE REFERENCED BY HOST VARIABLE** *variable-position*. **REASON CODE:** *reason-code*

Explanation: An error was encountered while DB2 was accessing, or attempting to access, the file referenced by the 'nth' host variable, where n= variable-position. The reason is indicated by the reason-code:

1 If the file name length is invalid, or if the path has an invalid format.

2 If the file option is invalid (the file option must be 2, 8, 16, or 32), or the specified file option is not consistent with the operation that DB2 attempted to perform. For example, the file option FILE_READ is specified on a FETCH SQL statement.

3 If the file cannot be found.

4 If the SQL_FILE_CREATE option was specified for a file with the same name as an existing file.

7 If a full disk was encountered while writing to the file.

9 If a media error was encountered while accessing the file.

12 If the HFS file DB2 attempted to open for a read, append, or rewrite operation is not a regular file:

• The BSAM data set that DB2 attempted to open for a read, append, or rewrite operation is not a physical sequential (PS) or partition organization (PO) data set.

- The BSAM data set that DB2 attempted to open for a read, append, or rewrite operation does not have a record format of VB, V, or U.
- The APPEND option was specified for a data set with partition organization (PO).

13 If errors were encountered when DB2 attempted to OPEN, READ, WRITE, or CLOSE an HFS file or BSAM data set, there might be a system completion code on the console to indicate the reason that DB2 was unable to perform the requested operation.

variable-position is set to 0 if the host variable position cannot be determined.

System action: The statement cannot be processed.

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

1 Correct the file name length, file name, and file path.

2 Correct the file option in the application.

3 Ensure that the file specified exists before attempting to access the file.

4 Delete the file if it is no longer required or specify a file name that does not currently exist.

7 Delete unnecessary files to free up disk space or specify a file that resides on another drive or file system with sufficient disk space. Also, ensure that no operating system or user file size limits were reached. If your application code page uses a multibyte encoding scheme, it is possible that only part of the last character was written. Ensure that the file contains only fully formed characters.

8 The maximum length of the result column must be extended to allow for the expansion that occurs when the string is converted.

9 Correct all errors on the media where the file has been read.

12 Take the appropriate action:
- Correct the file name to refer to a regular file if it is an HFS file.
- Correct the file name to refer to a PS or a PO data set if it is a BSAM data set.
- Correct the file operation to contain the correct action.

13 Correct the error based on the system completion code.

SQLSTATE: 428A1

-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.

SQLSTATE: 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.

Programmer response: Determine if the existing function already provides the functionality desired. If not, then the new function's signature will have to be changed (e.g. change the function name).

SQLSTATE: 42723

-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.

SQLSTATE: 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.

SQLSTATE: 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:

```
 =        <        >        >=       <=
 < >     ¬=       ¬>        ¬>
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
```

The names of built-in data types cannot be used as the name of a distinct type (for example, CHAR).

Restriction: You cannot use an asterisk (*) as a specific name for a user-defined or procedure name.

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.

SQLSTATE: 42939

-458   **IN A REFERENCE TO FUNCTION** *function-name* **BY SIGNATURE, A MATCHING FUNCTION COULD NOT BE FOUND**

Explanation: In a reference to function *function-name* by signature, no matching function could 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 default schema, and this is the schema where the function with the problem can be found. See *SQL Reference* for more information on default schema.

• In the SOURCE clause of a CREATE FUNCTION statement, the qualification comes from the SQL path. In this case, the is no matching function in the entire path.

Attention: A function cannot be sourced on the COALESCE, NULLIF, RAISE_ERROR, RID, 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.

SQLSTATE: 42883

-461   **A VALUE WITH DATA TYPE** *source-data-type* **CANNOT BE CAST TO TYPE** *target-data-type*

Explanation: The statement contains an implicit or explicit CAST, but the combination of the source and target data types is not supported. DB2 attempted to cast a value of *source-data-type* to the data type *target-data-type*. This combination 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: If an explicit CAST was specified, correct the CAST specification to specify a supported combination of source and target types.

SQLSTATE: 42846

-469   **SQL CALL STATEMENT MUST SPECIFY AN OUTPUT HOST VARIABLE FOR PARAMETER** *number*

Explanation: DB2 received an SQL CALL statement for a stored procedure. DB2 found the row in the SYSIBM.SYSROUTINES catalog table associated with the requested procedure name. However, parameter *number* was identified in the SYSIBM.SYSPARMS 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 SYSIBM.SYSPARMS.

System action: The statement cannot be executed.

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.SYSPARMS table contains incorrect information, the DROP PROCEDURE and CREATE PROCEDURE statements must be used to replace the

catalog definition for the stored procedure.

SQLSTATE: 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 JAVA receives this SQLCODE if an input parameter in the 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 non-null 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.

SQLSTATE: 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.

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.

SQLSTATE: 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.

SQLSTATE: 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. The name that you specified is not allowed. Adding delimiters does not make the name valid. The following names are restricted:

BIGINT	DECIMAL	REF
BINARY	DECFLOAT	ROWID
BLOB	DOUBLE	SMALLINT
BOOLEAN	DOUBLE PRECISION	TIME
CHAR	FLOAT	TIMESTAMP
CHAR VARYING	GRAPHIC	VARBINARY
CHARACTER	INT	VARCHAR
CHARACTER VARYING	INTEGER	VARGRAPHIC
CLOB	LONG VARCHAR	XML
DATALINK	LONG VARGRAPHIC	
DATE	NUMERIC	
DBCLOB	REAL	
DEC	ROWID	

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.

SQLSTATE: 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 *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.

SQLSTATE: 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 default schema, 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 SQL path. In this case, the first schema in the path containing a function with this name had other functions by the same name. Refer to *SQL Reference* for rules on default schema.

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 SQL path

SQLSTATE: 42725

-478 **DROP OR REVOKE ON OBJECT TYPE** *required-type* **CANNOT BE PROCESSED BECAUSE OBJECT** *object-name* **OF TYPE** *dependent-type* **IS DEPENDENT ON IT**

Explanation: A DROP or REVOKE statement was issued on an object type that is a dependency for one or more objects. An object type cannot be dropped or revoked if another object type has a dependency on that object type.

required-type
    The type of object that is required and cannot be dropped.

object-name
    The name of the object.

dependent-type
    The type of object that is dependent on the object type that is identified by *required-type*.

    Valid values:

- ALIAS
- CHECK CONSTRAINT (The value *object-name* contains the table name)
- DATABASE
- DEFAULT (The value *object-name* contains the table name)
- FUNCTION
- INDEX
- JAR
- PROCEDURE
- ROLE
- SEQUENCE
- STOGROUP
- TABLE
- TABLESPACE
- TRIGGER (for the trigger package)
- TRUSTED CONTEXT
- VIEW

The following information describes some situations where the dependency might occur:

DROP statement
    For a DROP statement, the following dependencies might exist based on the *required-type* value.

- If *required-type* is FUNCTION:
  - 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.
  - A materialized query table definition uses this function.
- If *required-type* is DISTINCT TYPE:
  - A column of a table is defined as this distinct type.
  - A parameter of a function is defined as this distinct type.
  - A parameter of a stored procedure is defined as this distinct type.
  - A sequence is defined with this distinct type as the data type.

    The dependency might be on one of the generated cast functions for a distinct type.

- If *required-type* is JAR:
  - A function or stored procedure uses this JAR in its EXTERNAL NAME.
  - Another JAR uses this JAR in its Java path.
- If *required-type* is SEQUENCE:
  - An SQL function is defined that references this sequence.
  - An SQL procedure is defined that references this sequence.
  - A view definition is defined that references this sequence.
  - A trigger is defined that references this sequence.
- If *required-type* is ROLE:
  - A trusted context uses this role.
  - The role is associated with the current thread.
  - The role is the owner of the object being dropped.

    In this case, code -478 can also be issued when revoking the privileges held by this role. When the role privileges are revoked, the cascading of the REVOKE statement might encounter dependencies that prevent the REVOKE from being successfully processed.

REVOKE statement
    For a REVOKE statement, the following dependencies might exist based on the *required-type* value.

- SYSADM is being revoked. When SYSADM is revoked, the cascading of the REVOKE statement might encounter dependencies that prevent the REVOKE statement from being successfully processed.
- If *required-type* is FUNCTION:
  - A function that is owned by the revokee is sourced on this function.
  - A view that is owned by the revokee uses this function.
  - A trigger package that is owned by the revokee uses this function.
  - A table that is owned by the revokee uses this function in a check constraint or user-defined default.
  - A materialized query table that is owned by the revokee uses this function in the definition.
  - An index owned by the revokee uses this function.
- If *required-type* is DISTINCT TYPE:
  - A column of a table that is owned by the revokee is defined as this distinct type.

- – A parameter of a function that is owned by the revokee is defined as this distinct type.
  - – A parameter of a stored procedure that is owned by the revokee is defined as this distinct type.
- If *required-type* is JAR:
  - – A function or stored procedure that is owned by the revokee uses this JAR in its EXTERNAL NAME.
  - – Another JAR that is owned by the revokee uses this JAR in its Java path.
- If *required-type* is PROCEDURE:
  - – A trigger definition that is owned by the revokee, contains a CALL statement with the name of this stored procedure.
- If *required-type* is SEQUENCE:
  - – An SQL function is defined that references this sequence.
  - – An SQL procedure is defined that references this sequence.
  - – A view definition is defined that references this sequence.
  - – A trigger is defined that references this sequence.

System action: The statement cannot be processed.

Programmer response: Remove the dependencies on this object, and then reissue the request.

SQLSTATE: The SQLSTATE depends on the values of *required-type* and *dependent-type*:

Values	SQLSTATE
required-type: JAR	46003
type2: FUNCTION or PROCEDURE	
required-type: JAR	4600C
dependent-type: JAR	
All other cases.	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.

SQLSTATE: 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.

SQLSTATE: 51030

-483 **IN CREATE FUNCTION FOR** *function-name* **STATEMENT, THE NUMBER OF PARAMETERS DOES NOT MATCH THE NUMBER OF PARAMETERS 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 parameter 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 SQL path needs to be corrected in order for correct function resolution to occur.

SQLSTATE: 42885

-487 *object-type object-name* **ATTEMPTED TO EXECUTE AN SQL STATEMENT WHEN THE DEFINITION OF THE FUNCTION OR PROCEDURE DID NOT SPECIFY THIS ACTION**

Explanation: A user-defined function or stored procedure *object-name* was invoked and attempted to execute SQL statements, 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 modifying 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.

SQLSTATE: 38001

-490 **NUMBER** *number* **DIRECTLY SPECIFIED IN AN SQL STATEMENT IS OUTSIDE THE RANGE OF ALLOWABLE VALUES IN THIS CONTEXT (** *minval*, *maxval* **)**

Explanation: A number (*number*) was specified that is not valid in the context in which it was specified. The minimum allowed value in this context is *minval*. The maximum allowed value in this context is *maxval*. *n* must be within the range specified by *minval* and *maxval* (*minval* =< *n* =< *maxval*).

System action: The statement was not executed.

Programmer response: Change the value *n* to a valid value in the statement.

SQLSTATE: 428B7

-491 **CREATE STATEMENT FOR USER-DEFINED FUNCTION** *function-name* **MUST HAVE A RETURNS CLAUSE AND: THE EXTERNAL CLAUSE WITH OTHER REQUIRED KEYWORDS; THE RETURN STATEMENT AND PARAMETER NAMES; OR THE SOURCE CLAUSE**

Explanation: A required clause is missing in the CREATE for the specified function.

function-name
       The name of the function.

System action: The statement cannot be processed.

Programmer response: Add the missing clauses, and reissue the failing statement.

For an EXTERNAL function, specify EXTERNAL and one of the following options:

- LANGUAGE
- PARAMETER STYLE

For an SQL FUNCTION, specify a RETURN statement, and a parameter name for each parameter.

For a user-defined SOURCE FUNCTION, specify the SOURCE clause.

SQLSTATE: 42601

-492 **THE CREATE FUNCTION FOR** *function-name* **HAS A PROBLEM WITH PARAMETER NUMBER** *number*. **IT MAY INVOLVE A MISMATCH 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 parameter of the function being created.

If the parameter of the function being created is a *table parameter* 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.

SQLSTATE: 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, MERGE, DELETE, or SELECT SQL statement resulted in a cost estimate 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_CATEGORY_B column in the RLST is to issue an error.

estimate_amount1
> The cost estimate (in processor seconds) if the prepared INSERT, UPDATE, MERGE, DELETE or SELECT statement were to be executed.

estimate_amount2
> The cost estimate (in service units) if the prepared INSERT, UPDATE, MERGE, 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) specified in the RLFASUERR column of the RLST. If you entered any negative number for the RLFASUERR column, the value for limit-amount defaults to zero.

System action:

The prepare of the dynamic INSERT, UPDATE, MERGE, DELETE, or SELECT statement was unsuccessful.

User response: If the warning is caused by an SQL statement that is consuming too much processor resource, attempt to rewrite the statement to perform more efficiently. Another option is to ask the administrator to increase the error threshold value in the RLST.

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 when the statement is executed, or for INSERT, UPDATE, MERGE, or DELETE statements that triggers are defined on the changed table. Check the DSN_STATEMNT_TABLE or the IFCID 22 record for this statement to find the reasons this SQL statement has been put in cost category "B". If the program cannot be changed, or if statistics cannot be obtained, ask the administrator to change the value in the RLF_CATEGORY_B column in the RLST to "Y" which allows the statement to execute or "W" which returns a warning instead of an error.

SQLSTATE: 57051

-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.

SQLSTATE: 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 65279 DBIDs has been exceeded.

2. For all other statements, the limit of 32767 OBIDs has been exceeded for that database.

3. If the database is a WORKFILE database, then one of the following reasons might apply:

   - The number of tablespaces in the WORKFILE database has exceeded the limit of 500.

   - The number of indexes defined on declared global temporary tables belonging to all agents on the local DB2 member has exceeded the limit of 10,000.

   - The number of tables and triggers belonging to a local agent exceeded the limit of 11,767. The tables in the WORKFILE database include work files, created global temporary tables, and declared global temporary tables.

System action: The SQL statement cannot be executed.

Programmer response: Take the appropriate action as described in the following cases:

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.

SQLSTATE: 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.

SQLSTATE: 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.

- If you want the cursor open and the connection was placed in the released state as a result of the DISCONNECT(AUTOMATIC) option, rebind the plan using DISCONNECT(CONDITIONAL).

Correct the error in the application, rebind the plan, and resubmit the job.

SQLSTATE: 24501

-501   **THE CURSOR IDENTIFIED IN A FETCH OR CLOSE STATEMENT IS NOT OPEN**

Explanation: The application program attempted either to fetch using a cursor or to close a cursor at a time when the specified cursor was not open.

System action: The statement cannot be processed.

Programmer response: Check for a previous SQL return code that might have closed the cursor.

- Commit and rollback operations close cursors.
- SQL return codes -404, -652, -679, -802, -901, -904, -909, -910, -911, -913, and -952 might force the cursor to close.

After the cursor is closed, any fetches or close cursor statements will receive SQLCODE -501.

If no previous SQL return codes have been issued, correct the logic of the application program to ensure that the cursor is open at the time the FETCH or CLOSE statement is processed.

SQLSTATE: 24501

Related reference

⇨ CLOSE (DB2 SQL)

⇨ FETCH (DB2 SQL)

-502   **THE CURSOR IDENTIFIED IN AN OPEN STATEMENT IS ALREADY OPEN**

Explanation: The application program attempted to execute an OPEN statement for a cursor that was already open.

System action: The statement cannot be executed. The cursor was unchanged (that is, it was not 'reopened').

Programmer response: Correct the logic of the application program to ensure that it does not attempt to execute an OPEN statement for a cursor that is already open.

SQLSTATE: 24502

-503 **A COLUMN CANNOT BE UPDATED BECAUSE IT IS NOT IDENTIFIED IN THE UPDATE CLAUSE OF THE SELECT STATEMENT OF THE CURSOR**

Explanation: The application program attempted to update (using a cursor) a value in a column of the object table that was not identified in the FOR UPDATE clause in the cursor declaration.

Any column that is to be updated must be identified in the FOR UPDATE clause of the cursor declaration.

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

Programmer response: Correct the application program. If the column is to be updated, its name must be added to the FOR UPDATE clause of the cursor declaration.

SQLSTATE: 42912

-504 **CURSOR NAME** *cursor-name* **IS NOT DECLARED**

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 or SQL routine 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.
- The declaration of a cursor *cursor-name* was not in scope for the reference to a cursor named *cursor-name*.

System action: The statement cannot be executed.

Programmer response: Check the application program or SQL routine 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 or SQL routine before SQL statements that reference the cursor.

If the *cursor-name* was <UNKNOWN>, the cursor was not successfully declared or allocated. This error 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 actions:

- 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 does 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.

SQLSTATE: 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,-802, -901, -904, -909, -910, -911, -913, and -952 may 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.

SQLSTATE: 24501

| -508 | THE CURSOR IDENTIFIED IN THE UPDATE OR DELETE STATEMENT IS NOT POSITIONED ON A ROW OR ROWSET THAT CAN BE UPDATED OR DELETED |

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 or rowset of the object table. The cursor must be positioned on the row that is to be updated or deleted.

This can occur 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 deletes and index column updates that are performed as a result of rolling back to a savepoint.

This can also occur with a sensitive dynamic cursor when the FOR ROW *n* OF ROWSET clause is specified and the specified row of the current rowset has been updated or deleted.

System action: The statement cannot be executed. No data was updated or deleted, and the cursor position is unchanged.

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 for single row or non-rowset cursors, the cursors are not positioned on a row if FETCH returned SQLCODE +100.

SQLSTATE: 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.

SQLSTATE: 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 error can be returned for the following reasons:

- A delete was performed from a read-only view or for an update in which the cursor was not defined with the FOR UPDATE clause.

- A target 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.

- DB2 has employed parallelism to execute the SELECT statement associated with the cursor named in a DELETE WHERE CURRENT OF cursor statement, or 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)).

- The cursor references a view on which an INSTEAD OF UPDATE trigger is defined, even if the view is an updatable view.

System action: The statement cannot be processed. No data was updated or deleted in the object table or view.

Programmer response: The requested UPDATE or DELETE cannot be performed. Refer to chapter 2 of *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).

For a view with INSTEAD OF triggers, drop those triggers.

SQLSTATE: 42828

| -511 | THE FOR UPDATE CLAUSE CANNOT BE SPECIFIED BECAUSE THE RESULT TABLE DESIGNATED BY THE SELECT STATEMENT CANNOT BE MODIFIED |

Explanation: The result table of the SELECT statement cannot be updated. This error 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 error can also

occur if a view is specified in the FROM clause and the view cannot be updated, or if a data change statement is specified within the SELECT statement, for example: SELECT from INSERT.

System action: The statement cannot be executed.

Programmer response: Updates cannot be performed on the result table as it is specified. Refer to chapter 2 of *SQL Reference* for information about restrictions on the updating of read-only result tables.

SQLSTATE: 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.

| • A PREPARE statement contains an ATTRIBUTES clause. This is not supported by the DB2 private protocols.

| • The statement cannot use DB2 private protocol because the PRIVATE_PROTOCOL subsystem parameter is set to NO.

| **System action:** The statement cannot be processed.

| **Programmer response:** If the object cannot be meaningfully eliminated from the statement, see your database administrator for other ways to obtain the data required.

| 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.

| **SQLSTATE:** 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.

SQLSTATE: 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 one 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.

SQLSTATE: 26501

| **-516** | **THE DESCRIBE STATEMENT DOES NOT SPECIFY A PREPARED STATEMENT**

| **Explanation:** An attempt was made to execute a DESCRIBE statement that did not refer to a statement that had been successfully prepared at the current server.

| **System action:** The statement cannot be executed.

| **Programmer response:** Verify that the statement name specified in the DESCRIBE statement is a statement that has been prepared at the current server.

| **SQLSTATE:** 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.

SQLSTATE: 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, or ASSOCIATE LOCATORS statement
- The statement named in the EXECUTE IMMEDIATE statement identifies a SELECT or ASSOCIATE LOCATORS 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.

SQLSTATE: 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.

SQLSTATE: 24506

-525	THE SQL STATEMENT CANNOT BE EXECUTED BECAUSE IT WAS IN ERROR AT BIND TIME FOR SECTION = *sectno* PACKAGE = *pkgname* CONSISTENCY TOKEN = *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

SQLSTATE: 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.

table-type
   CREATED or DECLARED

   CREATED is for a temporary table defined by the CREATE GLOBAL TEMPORARY TABLE statement.

   DECLARED is for a temporary table defined by the DECLARE GLOBAL TEMPORARY TABLE statement.

table-name
   Qualified name of 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 schema 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*

SQLSTATE: 42995

-530   **THE INSERT OR UPDATE VALUE OF FOREIGN KEY** *constraint-name* **IS INVALID**

Explanation: An insert or update 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 the 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 of the associated relationship.

System action:

The UPDATE, MERGE, 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 key values of the parent table to determine the cause of the problem.

SQLSTATE: 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.

SQLSTATE: 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.

If the statement that failed is an ALTER TABLE with ALTER PART ROTATE FIRST TO LAST, then there is a referential constraint that is defined with DELETE RESTRICT on the table, and the data in the partition that is to be reused cannot be deleted because of the referential constraint.

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*.

SQLSTATE: 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.

SQLSTATE: 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.

SQLSTATE: 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 subquery 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 processed. 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.

SQLSTATE: 42914

-537   THE PRIMARY KEY, FOREIGN KEY, UNIQUE, OR PARTITIONING KEY CLAUSE IDENTIFIES COLUMN *column-name* MORE THAN ONCE

Explanation: PRIMARY KEY, FOREIGN KEY, UNIQUE, or PARTITIONING KEY 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.

SQLSTATE: 42709

-538   FOREIGN KEY *name* DOES NOT CONFORM TO THE DESCRIPTION OF A PARENT KEY OF TABLE *table-name*

Explanation: The definition of the indicated foreign key does not conform to the description of parent key of the indicated table due to one of the following reasons:

- The referenced parent key has not been defined as a primary key or a unique key.
- The keys do not have the same number of columns.
- The description of the keys are not identical. The requirement for identical descriptions includes data type, length attribute, and field procedure.

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 processed.

Programmer response: Correct the statement so that the description of the foreign key references a primary key or unique key, or so that the description of the foreign key conforms to that of a parent key of the indicated table.

SQLSTATE: 42830

-539   TABLE *table-name* DOES NOT HAVE A PRIMARY KEY

Explanation: DB2 cannot perform the CREATE or ALTER TABLE statement 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 processed.

Programmer response: Correct the statement to reference a table with a primary key, or define a primary key with ALTER TABLE ADD PRIMARY KEY before referencing the table in a FOREIGN KEY clause.

SQLSTATE: 42888

-540   THE DEFINITION OF TABLE *table-name* IS INCOMPLETE BECAUSE IT LACKS A PRIMARY INDEX OR A REQUIRED UNIQUE INDEX

Explanation: An attempt was made to use table *table-name* in a CREATE or ALTER statement to define a foreign key or a clone table, or it was referenced in an SQL manipulative statement. However, the current

status of the table is incomplete, so it cannot be used as specified. The definition of the table may be incomplete because the table was defined with a PRIMARY KEY clause, a UNIQUE clause, or a ROWID column with the GENERATED BY DEFAULT attribute. The definition of the table 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.

SQLSTATE: 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.

In the case of a column identified in a REFERENCES clause, drop the parent table then recreate it with referenced columns defined as NOT NULL. Afterwards, rerun the statement.

SQLSTATE: 42831

-543   **A ROW IN A PARENT TABLE CANNOT BE DELETED BECAUSE THE CHECK CONSTRAINT** *check-constraint* **RESTRICTS THE DELETION**

Explanation: The delete operation cannot be executed because the target table is a parent table and is connected with a referential constraint to a dependent table with a delete rule of SET NULL. However, a check constraint defined on the dependent table restricts the column from containing a null value.

System action: The DELETE statement was not executed. The contents of the tables are unchanged.

Programmer response: Examine the foreign key and its delete rule in the dependent table and the conflicting check constraint. Change either the delete rule or the check constraint so that they do not conflict.

SQLSTATE: 23511

-544   **THE CHECK CONSTRAINT SPECIFIED IN THE ALTER TABLE STATEMENT CANNOT BE ADDED BECAUSE AN EXISTING ROW VIOLATES THE CHECK CONSTRAINT**

Explanation: An existing row violates the check constraint specified in the ALTER TABLE statement.

System action: The statement cannot be executed. The check constraint definition is not added to the table. The table definition is unchanged.

Programmer response: Examine the check constraint definition that was specified in the ALTER TABLE statement and the data in the table to determine why the ALTER TABLE statement was rejected.

You can determine which rows violated the check constraint by using the SELECT statement, negating the check constraint in the WHERE clause. For example:

```
SELECT * FROM table WHERE (NOT (check-condition));
```

SQLSTATE: 23512

-545   **THE REQUESTED OPERATION IS NOT ALLOWED BECAUSE A ROW DOES NOT SATISFY THE CHECK CONSTRAINT** *check-constraint*

Explanation:

Check constraint violations occurred on an INSERT, UPDATE, or MERGE statement. The resulting row violated the check constraint definition on the table.

System action:

The INSERT, UPDATE, or MERGE 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, MERGE, DELETE, or UPDATE statement was rejected. The data must be changed to satisfy the check constraint.

SQLSTATE: 23513

-546   **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.
- The constraint contains an XML column
- The constraint definition contains an XMLQuery expression.
- The constraint definition refers to a DECFLOAT 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.

SQLSTATE: 42621

-548   **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 < big 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.

- The constraint contains an XML column.
- The constraint definition contains an XMLQuery expression.
- The constraint definition refers to a DECFLOAT column.
- An XMLQUERY or XMLEXISTS argument list contained two arguments with the same name.

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.

SQLSTATE: 42621

-549   **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
        The SQL statement in error

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 *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.

SQLSTATE: 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 data change operation), or if *auth-id* is trying to create a table or view with an authorization ID other than its own.

You can create a table from an *auth-id* other than your own only if your authorization ID is SYSADM, DBADM, or DBCTRL. You can create a view from an *auth-id* other than your own only if your authorization ID is SYSADM.

If you are using a trusted context, the token *auth-id* might return a role instead of an authorization ID. A role is returned if a role was in effect and the authorization checking is performed against the role, rather than the authorization ID of the session, when the condition was encountered. Otherwise an authorization ID is returned. A role is returned in the following format as a single token:

- ROLE: *role-name*

In addition to the situations mentioned previously, this error can occur for the following situations:

- When *operation* is GRANT ***, the keyword ALL was used in the GRANT statement, but the grantor *auth-id* does not have any privilege to grant.

- If *operation* is DROP PACKAGE, the *object-name* consists of the collection ID, the package name, and the consistency token. The consistency token uniquely identifies the version of the package that the user does not have authorization to drop.

- If *operation* is USAGE OF DISTINCT TYPE or USAGE OF JAR, the *object-name* identifies, respectively, the DISTINCT TYPE or JAR for which the *auth-id* lacks USAGE privilege.

- If *operation* is ALTER JAR, the *auth-id* lacks ALTERIN privilege on the schema of the JAR *object-name*.

- If this error occurs while DB2 is creating or altering a table that involves referential constraints, this error message reports that the user does not have the necessary ALTER privilege to perform a FOREIGN KEY, DROP FOREIGN KEY, DROP PRIMARY KEY, or DROP UNIQUE 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, one of the following conditions can occur:

  - 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 Part 3 (Volume 1) of the DB2 Administration Guide for information on authorization ID translation.

  - If an alias name was used in the SQL statement, the *object-name* is the resolved remote table name or view name.

- If this error occurs during invocation of a routine, the authorization ID *auth-id* does not have the EXECUTE privilege on any candidate routine in the SQL path. The variable for *object-name* is the name of a candidate routine in the SQL path.

Note: Beginning with Version 5, SQLCODE -551 is returned instead of SQLCODE -204 for the run-time error in which an object does not exist and the CURRENT RULES special register is set to STD.

System action: The statement cannot be executed.

Programmer response: To correct the error, verify the following situations:

- The *auth-id* has the authority to perform the operation.

- The *object-name* exists.

- The *auth-id* is not trying to create a table with a schema qualifier that is not the same as *auth-id*.

SQLSTATE: 42501

| -552 | *authorization-id* **DOES NOT HAVE THE PRIVILEGE TO PERFORM OPERATION** *operation*

Explanation: An operation was attempted by an authorization ID that lacks the required authority.

authorization-id
> The authorization ID that attempted to perform the operation.
>
> If you are using a trusted context, the *authorization-id* value might be a role instead of an authorization ID. A role is returned if a role was in effect and the authorization checking is performed against the role, rather than the authorization ID of the session, when the condition was encountered. Otherwise an authorization ID is returned. A role is returned in the following format as a single token:
>
> ```
> ROLE: role-name DOES NOT HAVE THE
> PRIVILEGE TO PERFORM OPERATION operation
> ```

operation
> The operation that was attempted.

System action: The statement cannot be processed.

Administrator response: Check for an attempted authorization violation.

Programmer response: Ensure that the authorization ID has been granted the authority necessary to perform the desired operation.

SQLSTATE: 42502

| -553 | *auth-id* **SPECIFIED IS NOT ONE OF THE VALID AUTHORIZATION IDS FOR REQUESTED OPERATION**

Explanation: The statement failed for one of the following reasons:

- 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.
- The authorization ID specified as the value of the PACKAGE OWNER option for a CREATE or ALTER PROCEDURE statement is neither the user's primary authorization ID nor one of the associated secondary authorization IDs.

System action: The statement cannot be processed.

User response: Change the authorization ID to a value that the user can use.

SQLSTATE: 42503

| -554 | **AN AUTHORIZATION ID OR ROLE CANNOT GRANT A PRIVILEGE TO ITSELF**

Explanation: An authorization ID or a role attempted to execute a GRANT statement in which that ID itself appears as one of the entries in the list of 'grantee' authorization IDs or role names.

An authorization ID or a role 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 4 of *SQL Reference* for information about restrictions on the use of the GRANT statement.

SQLSTATE: 42502

| -555 | **AN AUTHORIZATION ID OR ROLE CANNOT REVOKE A PRIVILEGE FROM ITSELF**

Explanation: An authorization ID or a role attempted to execute a REVOKE statement in which that ID itself appears as one of the entries in the list of authorization IDs or role names to be revoked.

An authorization ID or a role cannot REVOKE its own privilege. However, if SQLRULES(STD) is in effect or CURRENT RULES contains STD, REVOKE from self is allowed.

System action: The statement cannot be executed. No privileges were revoked.

Programmer response: Refer to chapter 2 of *SQL Reference* for information about restrictions on the use of the REVOKE statement.

SQLSTATE: 42502

| -556 | *revoke-target* **CANNOT HAVE THE** *privilege* **PRIVILEGE** *object-name* **REVOKED BY** *revoker-id* **BECAUSE THE REVOKEE DOES NOT POSSESS THE PRIVILEGE OR THE REVOKER DID NOT MAKE THE GRANT**

Explanation: The REVOKE statement was not successful.

revoke-target
> The authorization ID that the revoke attempt was made against.

privilege
> The name of the privilege that was to be revoked.

object-name
: The name of the object that the privilege applies to.

revoker-id
: The authorization ID that attempted to revoke the privilege.

If you are using a trusted context, the tokens revoke-target and revoker-id might return a role instead of an authorization ID. A role is returned if a role was in effect and the authorization checking is performed against the role, rather than the authorization ID of the session, when the condition was encountered. Otherwise an authorization ID is returned. A role is returned in the following format as a single token:

ROLE: role-name

A failed revocation attempt is commonly caused by one or more of the following conditions:

- The authorization ID that was the target of the REVOKE statement, revoke-target, does not possess the privilege that was to be revoked.
- The revoking authorization ID, revoker-id, did not explicitly grant the privilege to revoke-target. 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.
- The authorization ID revoke-target is the owner of the specified object. No authorization ID, not even SYSADM, can revoke privileges on an object from the object owner.
- If privilege is "***": The keyword ALL was used in the REVOKE statement, but revoke-target did not possess any privilege to revoke.
- If revoker-id is "ALL": The BY ALL clause was used in the REVOKE statement, but revoke-target did not possess any privilege to revoke.
- If revoker-id holds SYSADM or SYSCTRL authority: The BY clause might have been omitted from the REVOKE statement.

System action: The statement was not executed. No privileges were revoked from any authorization ID.

Programmer response: Check the appropriate authorization catalog tables to verify that revoke-target possesses the privilege to be revoked. Issue a query with GRANTEE set to the value in revoke-target and the privilege column not equal to blanks. Correct and reissue the REVOKE statement.

SQLSTATE: 42504

-557
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.

SQLSTATE: 42852

-558
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 processed.

Programmer response: Correct the syntax, and reissue the statement.

SQLSTATE: 56025

Related reference

GRANT (DB2 SQL)

REVOKE (DB2 SQL)

-559
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.

SQLSTATE: 57002

-567   *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.

bind-type
> Type of bind subcommand (BIND | REBIND | FREE).

auth-id   Authorization ID of the package owner.

package-name
> Name of the package
> (location.collection.package.version)

privilege
> Name of the privilege not held:
> - BINDADD—The authority to create a new package using BIND with the ADD option.
> - BIND—The authority to BIND (REPLACE) or REBIND a package.
> - COPY—The authority to COPY from the indicated package
> - CREATE IN—The authority to create a package in the indicated collection.

If you are using a trusted context, the token *auth-id* might return a role instead of an authorization ID. A role is returned if a role was in effect and the authorization checking is performed against the role, rather than the authorization ID of the session, when the condition was encountered. Otherwise an authorization ID is returned. A role is returned in the following format as a single token:

- ROLE: *role-name*

System action: The indicated package is not bound, rebound, or freed.

System programmer response: The indicated privilege must be granted to the authorization ID that will become the package owner.

SQLSTATE: 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.

SQLSTATE: 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 processed.

Programmer response: Create a unique index with the specified columns for the parent table.

SQLSTATE: 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 SESSION_USER, or CURRENT SQLID special register is specified and the length attribute of the character string column is not sufficient to store a value that is 8 characters when the value is expressed in CCSID 37.

- 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.

- A decimal floating point (DECFLOAT) constant is specified. A decimal floating point cannot be restricted to zero scale numbers and, as such, may not be used in IDENTITY columns.

System action: The SQL statement cannot be executed.

Programmer response: Specify a default value that is valid for the definition of the column.

SQLSTATE: 42894

-575   VIEW *view-name* CANNOT BE REFERENCED

Explanation: An alteration was made to a table underlying view view-name which caused the view definition to become invalid. The view must be successfully regenerated with an ALTER VIEW statement before it can be referenced in a statement other than ALTER VIEW, GRANT, REVOKE, DROP, COMMENT, or LABEL.

System action: The statement cannot be processed.

Programmer response: Issue an ALTER VIEW statement to regenerate the view.

SQLSTATE: 51024

-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.

- A user-defined function or stored procedure object-name was invoked and attempted to use a NEXT VALUE expression. However, the function or procedure was defined without the MODIFIES SQL DATA 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 and procedures. The SQL data access option in effect does not allow for modifying the data.

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 modify data, or remove the failing SQL statement from the external function or procedure.

SQLSTATE: 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. The SQL data access option in effect does not allow for reading data.

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.

SQLSTATE: 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.

SQLSTATE: 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
- binary string

If encoded in Unicode, character and graphic data types are compatible, however. Refer to DB2 SQL Reference for more information about Unicode.

System action: The statement cannot be processed.

Programmer response: Correct the *result-expressions* so that they are compatible.

SQLSTATE: 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. However, an IN predicate is allowed within a select list or VALUES clause if that IN predicate explicitly includes a list of expressions.

System action: The statement cannot be processed.

Programmer response: Correct the *search-condition*.

SQLSTATE: 42625

-583 **THE USE OF FUNCTION OR EXPRESSION *name* IS INVALID BECAUSE IT IS NOT DETERMINISTIC OR HAS AN EXTERNAL ACTION**

Explanation: The function *name* is defined as a non-deterministic function or a function with an external action, or the expression *name* is defined as a non-deterministic expression. This type of function or expression 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 is specified.
- in an expression of an ORDER BY clause
- in a key-expression of an index definition
- in an expression of a GROUP BY clause

System action: The statement cannot be executed.

Programmer response: If the use of a non-deterministic or external action function or expression was not intended, substitute a function or expression without these characteristics. If the behavior associated with the non-deterministic or external action function or expression 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 or expression would be specified in each search-condition.
- Remove the WITH CHECK OPTION from the CREATE VIEW statement.
- Remove the function or expression from the GROUP BY clause.
- Remove the function or expression from the ORDER BY clause. If the column is part of the result set of the query, change the expression in the ORDER BY clause to the *simple-integer* or *simple-column-name* form of the sort key.

SQLSTATE: 42845

-584   INVALID USE OF NULL

Explanation: When the NULL keyword is provided in the USING *source-table* clause of the MERGE statement, it must be explicitly cast to a supported data type.

System action: The statement cannot be processed.

User response: Specify the NULL keyword within a CAST expression when using NULL within the USING VALUES clause of the MERGE statement.

SQLSTATE: 42608

-585   THE COLLECTION *collection-id* APPEARS MORE THAN ONCE IN THE SET *special-register* STATEMENT

Explanation: The SET statement for special register *special-register* includes *collection-id* more than once.

System action: The statement cannot be executed.

Programmer response: Remove duplicate occurrences of *collection-id* from the SET statement for the special register.

SQLSTATE: 42732

-586   THE TOTAL LENGTH OF THE CURRENT PATH SPECIAL REGISTER CANNOT EXCEED 2048 CHARACTERS

Explanation: The CURRENT PATH special register is defined as a VARCHAR(2048). The content of the string includes each schema name delimited with double quotes and sepa- rated from the next schema name by a comma. The total length of the string of all schema names in the CURRENT PATH cannot exceed 2048 characters. A SET 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 2048 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.

SQLSTATE: 42907

-589   A POSITIONED DELETE OR UPDATE STATEMENT FOR CURSOR *cursor-name* SPECIFIED A ROW OF A ROWSET, BUT THE CURSOR IS NOT POSITIONED ON A ROWSET

Explanation: The FOR ROW *n* OF ROWSET clause was specified on a positioned DELETE or UPDATE statement, but the cursor is not currently positioned on a rowset.

System action: The statement cannot be processed.

Programmer response: Issue a FETCH statement to position the cursor on the desired rowset, and then reissue the positioned DELETE or UPDATE statement. If the cursor is not defined for rowset access, redefine the cursor first.

SQLSTATE: 24520

-590   NAME *name* IS NOT UNIQUE IN THE CREATE OR ALTER FOR ROUTINE *routine-name*

Explanation: The *name* specified on a CREATE or ALTER statement for *routine-name* is not unique. The name was specified for a parameter, SQL variable, cursor, label, or condition, but the name is not unique. The value for *name* must adhere to the following rules:

- A parameter name must be unique within the parameter list.
- An SQL variable name must be unique within the compound statement in which it is declared, excluding any declarations within compound statements that are nested within the compound statement that declares the SQL variable.
- An SQL variable name must not be the same as a parameter name.
- A cursor name must be unique within the procedure body in which it is declared, excluding any declaration within compound statements that are nested within the compound statement that declares the cursor.
- A condition name must be unique within the compound statement in which it is declared, excluding any declarations within compound statements that are nested within the compound statement that declares the condition.
- A label must be unique within a compound statement, **including** any labels within compound statements that are nested within the compound statement that defines the label.

System action: The statement cannot be processed.

Programmer response: Change the name so that it is unique.

SQLSTATE: 42734

-592   NOT AUTHORIZED TO CREATE FUNCTIONS OR PROCEDURES IN WLM ENVIRONMENT *env-name*

Explanation: This message is issued when the check for authorization to the WLM application environment in *env-name* token failed.

System action: The statement cannot be executed.

Programmer response: To correct the error, choose a different value for the WLM ENVIRONMENT keyword

or request authorization to create objects in the specified WLM ENVIRONMENT from the system administrator. Then, reissue the SQL statement.

SQLSTATE: 42510

-593 **NOT NULL MUST BE SPECIFIED FOR ROWID (OR DISTINCT TYPE FOR ROWID) OR ROW CHANGE TIMESTAMP COLUMN** column-name

Explanation: ROWID columns and distinct type columns for which the source type is a ROWID, as well as row change timestamp columns, 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. When a row change timestamp column is defined on a CREATE TABLE or ALTER 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 the column column-name.

SQLSTATE: 42831

-594 **ATTEMPT TO CREATE A NULLABLE ROWID OR DISTINCT TYPE COLUMN** column-name

Explanation: A CREATE VIEW statement attempted to create a new view with a nullable ROWID column. ROWID columns (or distinct type columns for which the source type is a ROWID) do not support null values. One of the following situations has occurred:

• The subselect of a CREATE VIEW statement involves an outer join for which a column of the result table is a ROWID column that needs to allow for null values.

System action: The statement cannot be executed.

Programmer response: Change the content of the statement so that it does not try to create a ROWID column which must allow for null values.

SQLSTATE: 42831

-601 **THE NAME (VERSION OR VOLUME SERIAL NUMBER) OF THE OBJECT TO BE DEFINED OR THE TARGET OF A RENAME STATEMENT IS IDENTICAL TO THE EXISTING NAME (VERSION OR VOLUME SERIAL NUMBER)** object-name **OF THE OBJECT TYPE** object-type

Explanation: An attempt to name an object failed because the name is already in use for an object of the same type.

object-name
        The name of the object.

object-type
        The type of object.

The specific cause of this error is indicated by the object-type value.

object-type=
        If the error was encountered for a particular version of a native SQL procedure, the name token might return the following information: name-of-procedure VERSION version-id.

object-type=
        Procedure SYSPROC.XSR_REGISTER was invoked with name that already exists in the XML schema repository. The procedure attempted to add new values of XSR SCHEMA and JAR to the possible values for the object-type token.

object-type=
        A RENAME statement specified a target name name, but an object with the same name is already defined in the DB2 subsystem.

object-type=**CONSTRAINT**
        The object name was specified in the FOREIGN KEY clause, CHECK clause, PRIMARY KEY clause, or UNIQUE clause of either a CREATE or ALTER TABLE statement. All referential integrity, check constraint, primary key, and unique key constraint names defined on a table must be unique.

object-type=**DISTINCT TYPE**
        A CREATE DISTINCT TYPE statement failed. A user-defined type already exists with the same name as the distinct type name specified in the CREATE DISTINCT TYPE statement.

object-type=**FUNCTION**
        A CREATE FUNCTION or CREATE DISTINCT TYPE statement failed. A routine already exists with the same name as the name specified in the CREATE statement.

object-type=**JAR**
        An invocation of procedure SQLJ.INSTALL_JAR failed. A JAR already exists with the same name as the name specified on the invocation of procedure SQLJ.INSTALL_JAR.

object-type=**PROCEDURE**
        A CREATE PROCEDURE statement failed. A routine already exists with the same name as the name specified in the CREATE PROCEDURE statement. If the CREATE PROCEDURE statement for an SQL procedure failed, then an SQL procedure might already with the same name as the external name that was implicitly or explicitly specified.

object-type=**ROLE**
> A CREATE ROLE statement failed. A role already exists with the same name as the name specified in the CREATE ROLE statement.

object-type=**SEQUENCE**
> ACREATE SEQUENCE statement failed. A a sequence already exists with the same name as the sequence name that was specified in the CREATE SEQUENCE statement.

object-type=**TABLE**
> A CREATE ALIAS statement failed. The alias name specified in the CREATE ALIAS statement is identical to the table name or view name specified. The table might not exist in the DB2 subsystem.

object-type=**TRUSTED CONTEXT**
> A CREATE TRUSTED CONTEXT statement failed. A trusted context already exists with the same name as the name specified in the CREATE TRUSTED CONTEXT statement.

object-type=**VIEW**
> A CREATE ALIAS statement failed. The alias name specified in the CREATE ALIAS statement is identical to the table name or view name specified. The view might not exist in the DB2 subsystem.

object-type=**VERSION**
> An ALTER statement attempted to define a new version of a routine and specified a version identifier that already exists for the specified routine.

object-type=**VOLUME**
> An ALTER statement attempted to add a volume name to a storage group, but a volume with volume serial number already exists for the storage group.

object-type=**XSR SCHEMA**
> An invocation of procedure SYSPROC.XSR_REGISTER failed. An XSR XML schema already exists with the same name as the name specified on the invocation of procedure SYSPROC.XSR_REGISTER.

System action: The CREATE, ALTER or RENAME statement cannot be executed. No new object was created, no existing object was altered, and no existing object was renamed.

Programmer response: Either drop or remove the existing object or choose another name.

If *object-type* is data set, do an IDCAMS DELETE of the data set before retrying the CREATE statement. Refer to *SQL Reference* for information about the scope of object names in DB2.

SQLSTATE: 42710

46002

-602   **TOO MANY COLUMNS OR KEY-EXPRESSIONS SPECIFIED IN A CREATE INDEX OR ALTER INDEX STATEMENT**

Explanation: The number of columns or key-expressions specified in the CREATE INDEX or ALTER INDEX statement exceeds 64, which is the maximum that is permitted by DB2.

System action: The statement cannot be executed. The specified index was not created.

Programmer response: The index definition must be modified to conform to the system-imposed column or key-expression limit of 64.

SQLSTATE: 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 statement 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, consider creating a nonunique index.

SQLSTATE: 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 attribute 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 2 of *SQL Reference* for information about valid length, precision, and scale attributes for the data type of an object.

SQLSTATE: 42611

-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. For example, you cannot set LOGGED or NOT LOGGED when you create or alter a table space in the DB2 catalog (DSNDB06) database, and you cannot clone catalog and directory objects.

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.

SQLSTATE: 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.

SQLSTATE: 53088

-612   *identifier* **IS A DUPLICATE NAME**

Explanation: Column names must be unique within an index, a table, a view, or in the UPDATE OF clause of a trigger definition. The following situations might cause this error:

- For a CREATE INDEX, CREATE TABLE, CREATE VIEW or ALTER TABLE statement, the same *column-name* was specified for two or more columns of the index, table, view.

- For a CREATE or ALTER TABLE statement, a constraint specified an XML column. The constraint definition contains an expression that invokes the XMLQUERY function or uses the XMLEXISTS predicate.

- For a CREATE TRIGGER statement, the UPDATE OF clause specified the same column name more than once.

- The PASSING clause of an XMLQUERY, or XMLEXISTS contains two arguments with the same name.

- The SQL data change statement uses an include column, and the column-name specified is the same as another column-name of the target table or view or another include column.

- An XMLQUERY, or XMLEXISTS argument list contains two arguments with the same name.

Column names must be unique within an index, a table, a view, or in the UPDATE OF clause of a trigger definition. Additionally, 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 processed

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.

SQLSTATE: 42711

-613   **THE PRIMARY KEY OR A UNIQUE CONSTRAINT IS TOO LONG OR HAS TOO MANY COLUMNS**

Explanation: This error code results from a problem with the columns that are defined for a PRIMARY KEY or UNIQUE constraint. 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.

If the failing statement was an ALTER TABLE statement that included the SET DATA TYPE clause to alter the definition of an existing column, a column being changed is part of a unique or primary constraint. The new sum of the lengths of the columns of the keys exceeds 255-n, where n is the number of columns allowing nulls. This sum currently exceeds the maximum number that is allowed.

If the failing statement was an ALTER TABLE statement with a PARTITIONING KEY specification, only 64 columns can be specified, and the combined lengths of all columns specified in the PARTITIONING KEY clause exceeds the maximum length of 255-n,

where *n* is the number of columns that can contain null values.

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.

SQLSTATE: 54008

-614 THE INDEX CANNOT BE CREATED OR ALTERED, OR THE LENGTH OF A COLUMN CANNOT BE CHANGED BECAUSE THE SUM OF THE INTERNAL LENGTHS OF THE COLUMNS FOR THE INDEX 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 as follows:

• For PADDED indexes, the sum of the length attributes of the columns must not be greater than 2000-*n*, where *n* is the number of columns that contain null values.

• For NOT PADDED indexes, the sum of the length attributes of the columns must not be greater than 2000-*n*-2*m*, where *n* is the number of nullable columns and *m* is the number of varying length columns.

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 2 of *SQL Reference* if you require a complete explanation of other possible maximum key lengths and how they are computed.

SQLSTATE: 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 use by the same application process.

SQLSTATE: 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.

System action: The statement cannot be processed. The specified object was not dropped.

Programmer response: Verify that the object specified in the DROP statement was, indeed, the object to be dropped. If so, all the existing objects that have a dependency on that object must first be dropped.

A LOB table space cannot be dropped when an association exists between it and another table space. The associated base table must be dropped first.

A populated auxiliary table and its index can only be dropped by dropping the associated base table.

A trigger package cannot be explicitly dropped. It can only be dropped by dropping the associated trigger with a DROP TRIGGER statement or by dropping the triggering table.

SQLSTATE: 42893

-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. Possible reasons are:

• CCSID ASCII was specified when a system database was being created.

• APPEND 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.

User response: Do not attempt to perform the requested operation on system databases.

SQLSTATE: 42832

-619　**OPERATION DISALLOWED BECAUSE THE DATABASE IS NOT STOPPED**

Explanation:　The statements CREATE, ALTER or DROP for a table space, table, or index in the database cannot be processed unless the database is stopped (using the STOP command).

System action:　The statement cannot be processed.

Programmer response:　Issue the -DISPLAY DATABASE command to verify that the work file database is stopped before resubmitting the statement.

SQLSTATE:　55011

-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 *stmt-type* indicates an attribute that is not allowed for a *space-type* space in the *database-type* database. For example, you cannot set LOGGED or NOT LOGGED when you create or alter a table space in a WORK FILE database.

keyword　Specifies the keyword that is not allowed.

stmt-type

　　　CREATE or ALTER

　　　CREATE is for CREATE TABLESPACE or CREATE INDEX.

　　　ALTER is for ALTER TABLESPACE or ALTER INDEX.

space-type

　　　TABLE or INDEX

　　　TABLE is for table space, and INDEX is for index space.

database-type

　　　WORK FILE or TEMP

System action:　The statement cannot be executed.

Programmer response:　Refer to *SQL Reference* for information about attributes that are allowed or not allowed for a *space-type* space in a *database-type* database. Correct and resubmit the *stmt-type* statement.

SQLSTATE:　53001

-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.

System programmer response:　If you suspect an error in DB2, refer to Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Programmer response:　Notify the system programmer. The inconsistency must be corrected before CREATE DATABASE will be successful.

SQLSTATE:　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, a 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.

SQLSTATE:　56031

-623　**A CLUSTERING INDEX ALREADY EXISTS ON TABLE** *table-name*

Explanation:　A given table can have only one cluster index. This error can occur for the following reasons:
- A CREATE INDEX statement would create a second cluster index on the specified table.
- An ALTER INDEX statement specified the CLUSTER clause, but there is already a clustering index defined for the table.

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.

SQLSTATE:　55012

-624　**TABLE** *table-name* **ALREADY HAS A PRIMARY KEY OR UNIQUE CONSTRAINT WITH SPECIFIED COLUMNS**

Explanation:　The code is used to report that a primary key or unique key cannot be defined in an ALTER TABLE statement because the table either:
- Already has a primary key, or

- Has an existing unique constraint with the same definition (same set of columns specified) as the new key.

System action: The statement cannot be run.

Programmer response: Do not attempt to define a table with more than one primary key, or a unique constraint that duplicates the definition of an existing unique constraint.

SQLSTATE: 42889

-625 **TABLE** *table-name* **DOES NOT HAVE AN INDEX TO ENFORCE THE UNIQUENESS OF THE PRIMARY OR UNIQUE KEY**

Explanation: The ALTER TABLE statement is invalid for one of the following reasons:

- The table does not have a unique index with a key that is identical to the nominated primary or unique key.
- A unique index exists, but the index is already being used to enforce referential constraints. In this case, DB2 does not choose the index to enforce the primary or unique 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 that is not already enforcing referential constraints.

SQLSTATE: 55014

-626 **THE ALTER STATEMENT IS NOT EXECUTABLE BECAUSE THE PAGE SET IS NOT STOPPED**

Explanation: An ALTER statement specifies an ADD PART, BUFFERPOOL, USING, PRIQTY, SECQTY, ERASE, or GBPCACHE clause, but the page set is not stopped.

System action: The SQL statement was not executed.

Programmer response: Stop the page set and resubmit the statement.

SQLSTATE: 55015

-627 **THE ALTER STATEMENT IS INVALID BECAUSE THE TABLE SPACE OR INDEX HAS USER-MANAGED DATA SETS**

Explanation: This error is issued for the following reasons:

- a CREATE or ALTER statement specified a PRIQTY, SECQTY, or ERASE clause, USING STOGROUP was not specified, and the table space or index has user-managed data sets. The primary and secondary

space allocation of a user-managed data set cannot be altered by means of an ALTER statement.

- an ALTER statement attempted to define a clone table for a base table that is in a table space that has user-managed data sets. A clone table cannot be defined for a base table that is in a table space that has user-managed data sets.

System action: The SQL statement cannot be executed.

Programmer response: Verify that the correct table, index, or partition is specified.

SQLSTATE: 55016

-628 **THE CLAUSES ARE MUTUALLY EXCLUSIVE**

Explanation: Mutually exclusive clauses were specified. In the cases where you alter an object, a clause was specified that conflicts with an existing property of the object.

- A *column-definition* value contains both NOT NULL and DEFAULT NULL clauses.
- A *column-definition* value contains both FIELDPROC and DEFAULT clauses.
- A *select-statement* value contains both the *update-clause* and the FOR FETCH ONLY clause.
- A RENAME clause was issued with another clause in a single ALTER statement. RENAME cannot be issued with any other clause in a single ALTER statement.
- LANGUAGE JAVA is not allowed for table functions.
- PARTITION BY SIZE was specified along with an IN clause that identified a table space that is not defined as a partition-by-growth table space.

CREATE DATABASE statements

- A CREATE DATABASE statement contains both the AS WORKFILE clause and the AS TEMP clause.

ALTER FUNCTION or CREATE FUNCTION statements

- 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 (such as EXTERNAL, LANGUAGE, or NO SQL).

- A CREATE FUNCTION statement was specified with a PARAMETER VARCHAR clause. You can specify CREATE FUNCTION with PARAMETER VARCHAR only if LANGUAGE C is also specified.
- A CREATE FUNCTION or ALTER FUNCTION statement can only contain the CAST FROM clause for external scalar functions.
- A CREATE FUNCTION or ALTER FUNCTION statement specified SCRATCHPAD. SCRATCHPAD must not be specified when LANGUAGE JAVA or PARAMETER STYLE JAVA is also specified for a function.
- A CREATE FUNCTION or ALTER FUNCTION statement specified FINAL CALL. FINAL CALL must not be specified when LANGUAGE JAVA or PARAMETER STYLE JAVA is also specified for a function.
- A CREATE FUNCTION or ALTER FUNCTION statement specified LANGUAGE JAVA, LANGUAGE COMPJAVA, or PARAMETER STYLE JAVA, with DBINFO. DBINFO must not be specified in these cases.
- A CREATE FUNCTION or ALTER FUNCTION statement specified LANGUAGE JAVA or PARAMETER STYLE JAVA, with RUN OPTIONS. RUN OPTIONS must not be specified in these cases.
- A CREATE FUNCTION or ALTER FUNCTION statement specified PARAMETER STYLE JAVA, but LANGUAGE JAVA was not specified.
- A CREATE FUNCTION or ALTER FUNCTION statement specified LANGUAGE JAVA, but did not specify PARAMETER STYLE JAVA.

ALTER INDEX or CREATE INDEX statements

- UNIQUE or UNIQUE WHERE NOT NULL was specified with PARTITIONED on CREATE INDEX. You cannot specify UNIQUE or UNIQUE WHERE NOT NULL with PARTITIONED on CREATE INDEX unless the index includes all the partitioning columns.
- A CREATE INDEX statement contains both a GENERATE KEY USING and column specified as ASC, DESC, or RANDOM.
- A CREATE INDEX statement contains XMLPATTERN and PARTITIONED.
- A CREATE INDEX or ALTER INDEX statement attempted to specify either CLUSTER, PARTITION BY or both for an XML index or an extended index.

ALTER PROCEDURE or CREATE PROCEDURE statements

- A CREATE PROCEDURE statement specified either FENCED or EXTERNAL indicating that an external SQL procedure is to be defined, and the statement also included one or more options which are allowed only for native SQL procedures. For example, PACKAGE OWNER can be specified on the CREATE PROCEDURE statement for a native SQL procedure, but it is not allowed for an external SQL procedure.
- A CREATE PROCEDURE statement was specified with a PARAMETER VARCHAR clause. You can specify CREATE PROCEDURE with PARAMETER VARCHAR only if LANGUAGE C is also specified.
- A CREATE PROCEDURE or ALTER PROCEDURE statement specified LANGUAGE JAVA or PARAMETER STYLE JAVA, with DBINFO. DBINFO must not be specified in these cases.
- A CREATE PROCEDURE or ALTER PROCEDURE statement specified PARAMETER STYLE JAVA, but LANGUAGE JAVA was not specified.
- A CREATE or ALTER PROCEDURE statement specified LANGUAGE JAVA, but did not specify PARAMETER STYLE JAVA.
- A CREATE PROCEDURE or ALTER PROCEDURE statement specified LANGUAGE JAVA with NO WLM ENVIRONMENT. NO WLM ENVIRONMENT must not be specified when LANGUAGE JAVA is also specified for a procedure.
- A CREATE PROCEDURE 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 PROCEDURE 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 DB2 must also be used.
- A CREATE PROCEDURE or ALTER PROCEDURE statement contains both a LANGUAGE REXX clause and either a PARAMETER STYLE DB2SQL or PARAMETER STYLE JAVA clause.
- A CREATE PROCEDURE or ALTER PROCEDURE statement specified LANGUAGE JAVA or PARAMETER STYLE

JAVA, with RUN OPTIONS. RUN OPTIONS must not be specified in these cases.

- A CREATE PROCEDURE or ALTER PROCEDURE statement contains a DEBUG MODE clause when neither LANGUAGE JAVA or LANGUAGE SQL are in effect for the procedure.

ALTER TABLE or CREATE TABLE statements

- An ALTER TABLE statement contains both a DROP CONSTRAINT clause and either a DROP FOREIGN KEY, DROP CHECK, DROP PRIMARY KEY, or DROP UNIQUE 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.
- An ALTER TABLE statement contains either an ADD MATERIALIZED QUERY or DROP MATERIALIZED QUERY clause, and some other clauses.
- EXTERNAL NAME was specified on ALTER TABLE for an SQL procedure. You can attempt the same action by issuing a DROP for the procedure and attempt rebuilding it with CREATE PROCEDURE.
- DATA CAPTURE CHANGES for ALTER TABLE or CREATE TABLE can only be specified for tables in table spaces with the LOGGED logging attribute.

ALTER TABLESPACE or CREATE TABLESPACE statements

- A CREATE TABLESPACE or ALTER TABLESPACE statement contains both LOCKPART YES and LOCKSIZE TABLESPACE.
- A USING VCAT clause was specified on a CREATE TABLESPACE or ALTER TABLESPACE statement for a partition-by-growth table space.
- A CREATE TABLESPACE or ALTER TABLESPACE statement specified MAXPARTITIONS and LOCKSIZE TABLE.
- NOT LOGGED for ALTER TABLESPACE is mutually exclusive with DATA CAPTURE CHANGES, which is an attribute of one or more of the tables in the table space.
- A CREATE TABLESPACE statement contains both the SEGSIZE and MEMBER CLUSTER clauses.
- A CREATE TABLESPACE statement specified MAXPARTITIONS and NUMPARTS.

CREATE TRIGGER statements

- 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.

ALTER TRUSTED CONTEXT statements

- A TRUSTED CONTEXT definition specified ATTRIBUTE JOBNAME with ATTRIBUTE ADDRESS or SERVAUTH or ENCRYPTION.

DECLARE CURSOR statements

- If INSENSITIVE or SENSITIVE is specified, then SCROLL must also be specified, either on DECLARE CURSOR or with the ATTRIBUTES clause of the PREPARE statement.
- If SCROLL is specified, then either INSENSITIVE or SENSITIVE STATIC must also be specified, either on DECLARE CURSOR or with the ATTRIBUTES clause of the PREPARE statement.

DECLARE GLOBAL TEMPORARY TABLE statements

- The AS (*subselect*) clause of a DECLARE GLOBAL TEMPORARY TABLE statement contains both an INCLUDING COLUMN DEFAULTS clause and a USING TYPE DEFAULTS clause.

PREPARE statements

- If INSENSITIVE or SENSITIVE is specified, then SCROLL must also be specified, either on DECLARE CURSOR or with the ATTRIBUTES clause of the PREPARE statement.
- If SCROLL is specified, then either INSENSITIVE or SENSITIVE STATIC must also be specified, either on DECLARE CURSOR or with the ATTRIBUTES clause of the PREPARE statement.
- The *attribute-string* value specified in the ATTRIBUTES clause of the PREPARE statement cannot specify conflicting options.

System action: The statement was not executed.

Programmer response: Review the permitted options for the statement that you want to issue, change the options specified in the statement, and reissue the statement.

SQLSTATE: 42613

Related reference

⇥ Statements (DB2 SQL)

-629   SET NULL CANNOT BE SPECIFIED BECAUSE FOREIGN KEY *name* **CANNOT CONTAIN NULL VALUES**

Explanation: The code 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 processed.

Programmer response: Change a column of the key to allow null values or change the delete rule.

SQLSTATE: 42834

-631   FOREIGN KEY *name* **IS TOO LONG OR HAS TOO MANY COLUMNS**

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.

SQLSTATE: 54008

-632   THE TABLE CANNOT BE DEFINED AS A DEPENDENT OF *table-name* **BECAUSE OF DELETE RULE RESTRICTIONS**

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.

SQLSTATE: 42915

-633   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.

SQLSTATE: 42915

-634   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.

SQLSTATE: 42915

-635   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.

SQLSTATE: 42915

-636   RANGES SPECIFIED FOR PARTITION *part-num* **ARE NOT VALID**

Explanation: The ranges specified for partition *part-num* are not valid for one of the following reasons:

- The partitioning key values specified in the limit key value specifications were not in either ascending or descending order.
- All of the columns in the partitioning key are ascending, and a constant or MINVALUE was specified following MAXVALUE in the limit key value specification for the partition. Once MAXVALUE is specified, all subsequent columns must be MAXVALUE.
- All of the columns in the partitioning key are descending, and a constant or MAXVALUE was specified following MINVALUE in the limit key value specification for the partition. Once MINVALUE is specified, all subsequent columns must be MINVALUE.

System action: The statement cannot be executed.

User response: Correct the range partitioning specifications in the statement for the identified partition.

SQLSTATE: 56016

-637 **DUPLICATE** *keyword* **KEYWORD OR CLAUSE**

Explanation: The SQL statement contains a duplicate specification for the keyword *keyword*. For example:

- DEFAULT, UNIQUE, and PRIMARY can only be specified once in a column definition.
- UNIQUE and PRIMARY cannot both be specified for the same column definition.
- PRIMARY can only be specified once in a CREATE TABLE statement.
- The *attribute-string* specified in the ATTRIBUTES clause of the PREPARE statement cannot specify an option more than once.
- ATTRIBUTE ENCRYPTION can only be specified once in a TRUSTED CONTEXT definition.
- There are more than one *xquery-context-item-expression* in the PASSING clause of an XMLQUERY or XMLEXISTS.
- WHEN MATCHED and WHEN NOT MATCHED clauses cannot be specified more than once in a MERGE statement.
- SKIP LOCKED DATA clause cannot be specified more than once for:
  - all clauses in *select-stmt*
  - SELECT INTO statements
  - search UPDATE statements
  - search DELETE statements

System action: The statement cannot be processed.

Programmer response: Correct the statement by removing duplicate clauses.

SQLSTATE: 42614

-638 **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.

SQLSTATE: 42601

-639 **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.

SQLSTATE: 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.DBNAMe = '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.

SQLSTATE: 56089

-643 **A CHECK CONSTRAINT OR THE VALUE OF AN EXPRESSION FOR A COLUMN OF AN INDEX EXCEEDS THE MAXIMUM ALLOWABLE LENGTH KEY EXPRESSION**

Explanation: The definition of a check constraint or expression of an index column exceeds the maximum allowable length:

- A check constraint exceeded 3800 UTF-8 bytes. Redundant blank spaces are excluded from this limit.
- A value for an expression for an index exceeded 4000 UTF-8 bytes.

System action: The CREATE TABLE or ALTER TABLE statement failed. The statement cannot be executed.

Programmer response: Change the constraint or expression so that it does not exceed the maximum allowable limit. If it is a check constraint, rewrite the check constraint definition so that it is less than 3800 UTF-8 bytes. You might need to divide a the check constraint into two or more smaller check constraints.

SQLSTATE: 54024

-644 **INVALID VALUE SPECIFIED FOR KEYWORD OR CLAUSE** *keyword-or-clause* **IN STATEMENT** *stmt-type*

Explanation: The value specified for the *keyword-or-clause* 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 2 of *SQL Reference* for information about the permissible values for the *keyword-or-clause* keyword in *stmt-type* statements.

SQLSTATE: 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, implicitly defined, LOB table space, or an XML table space in which an existing table

already resides. Only one table can reside in these types of table spaces.

System action: The statement cannot be executed. The 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, implicitly defined, LOB or XML table space.

SQLSTATE: 55017

-647 **BUFFERPOOL** *bp-name* **FOR IMPLICIT OR EXPLICIT TABLESPACE OR INDEXSPACE** *name* **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. Alternatively, on a CREATE TABLE statement without an IN clause, the buffer pool, which is chosen by DB2 implicitly according to the actual record size, 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 and the buffer pool is chosen by DB2. 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.

SQLSTATE: 57003

-650 **THE ALTER STATEMENT CANNOT BE EXECUTED, REASON** *reason-code*

Explanation: The ALTER statement cannot be executed for the indicated reason.

reason-code
    A numeric value that indicates the reason that the statement cannot be executed.

    5   An ALTER statement with a PIECESIZE clause is not allowed for a partitioning index.

    6   An ALTER statement with a PIECESIZE 4G clause is not allowed for non-partitioned indexes on a non-large table.

    11   An ALTER statement with an

ENDING AT clause is not allowed for an index on a partitioned base table with LOB columns or the table itself.

12   ALTER INDEX is not allowed when there is a pending SQL statement.

13   ALTER TABLE is not allowed when there is a pending SQL statement.

14   An ALTER INDEX statement with an ENDING AT clause is not allowed when using table-controlled partitioning.

15   Using ALTER to change the attributes of a partition values is not allowed for an index on a partitioned base table with LOB columns, or the table itself.

16   ALTER TABLE DATA CAPTURE CHANGES is not allowed for table spaces in advisory REORG-pending (AREO) state.

17   ALTER TABLE cannot be used to drop clone when the table itself is a clone.

18   ALTER INDEX is not allowed when the table has defined a clone.

19   ALTER TABLESPACE is not allowed when the table space contains a table that has a clone defined.

20   ALTER TABLE cannot be used to drop clone when the table does not have a defined clone.

21   ALTER TABLE SET DEFAULT and DROP DEFAULT are not allowed for tables in advisory REORG-pending (AREO) state.

22   ALTER TABLE SET DEFAULT and DROP DEFAULT are not allowed for tables referenced by a materialized query table or view.

System action: The ALTER statement was not executed.

Programmer response: Correct the error based on the information provided for the *reason-code* value, and reissue the statement.

SQLSTATE: 56090

-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.

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.

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.

SQLSTATE: 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.

SQLSTATE: 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.

SQLSTATE: 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.

SQLSTATE: 56036

-658   **A** *object-type* **CANNOT BE DROPPED USING THE** *statement* **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.

SQLSTATE: 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 2 of *SQL Reference* for information about the requirements that must be satisfied by the definitions for the cluster indexes for partitioned tables.

SQLSTATE: 53035

-661   *object-type object-name* **CANNOT BE CREATED ON PARTITIONED TABLE SPACE** *tspace-name* **BECAUSE THE NUMBER OF PARTITION SPECIFICATIONS IS NOT EQUAL TO THE NUMBER OF PARTITIONS OF THE TABLE SPACE**

Explanation: The *object-name* definition is incorrect for one of the following reasons:

- If *object-type* is INDEX, 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 partition specifications as there are partitions in the table space. The definition for the cluster index for a partitioned table must contain exactly as many partition specifications as there are partitions in the table space in which that table resides. Also, the partition numbers must be valid and unique.
- If *object-type* is TABLE, the number of partitions that is specified in the partitioning clause of the CREATE TABLE statement differs from the number of partitions in the table space in which the table is being created.

System action: The statement cannot be processed. The specified cluster index or table was not created.

Programmer response: Examine the definition of the partitioned table space to determine how many partitions have been specified. Correct the syntax of the CREATE INDEX or CREATE TABLE statement to provide the proper number of partition specifications. Refer to the topics on CREATE TABLE and CREATE INDEX in chapter 2 of *SQL Reference* for more information.

SQLSTATE: 53036

-662 **A PARTITIONED INDEX CANNOT BE CREATED ON A NON-PARTITIONED, PARTITION-BY-GROWTH OR RANGE-PARTITIONED UNIVERSAL TABLE SPACE** *tspace-name*

Explanation: The CREATE INDEX statement could not be processed. The value in *reason-code* identifies the problem.

01 The CREATE INDEX statement contains the PARTITION BY clause for index-controlled partitioning, but the table on which the index is created has one of the following characteristics:

  • The table is not in a partitioned table space.

  • The table is in a partition-by-growth or a range-partitioned universal table space.

02 The CREATE INDEX statement contains the PARTITIONED option, but the table on which the index is created has one of the following characteristics:

  • The table is not in a partitioned table space.

  • The table is in a partition-by-growth 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. Review the proper usage of the PARTITION BY clause or the PARTITIONED option in CREATE INDEX statements

SQLSTATE: 53037

Related reference

➡ CREATE INDEX (DB2 SQL)

-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.

SQLSTATE: 53038

-665 **THE PARTITION 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 PARTITION clause is specified.

• The table space is a partition-by-growth table space and the PARTITION clause is specified.

• The table space or index is partitioned, a partition attribute (FREEPAGE or PCTFREE) is specified, and the PARTITION clause is not specified.

• The integer specified in the PARTITION 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 PARTITION BY clause is specified without a PARTITION clause to specify the range for the partition. You must specify a PARTITION clause with a range to alter the PARTITION BY specification.

• Using ALTER to change the attributes of a partition *values* is not allowed for an index on a partitioned base table with LOB columns, or the table itself.

System action: The statement cannot be processed.

Programmer response: Determine whether the table space or index you want to alter is partitioned. If it is partitioned, specify a PARTITION clause that identifies the partition you want to alter. If it is not partitioned, do not specify the PARTITION clause.

SQLSTATE: 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.

SQLSTATE: 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.

SQLSTATE: 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.

SQLSTATE: 56018

-669 THE OBJECT CANNOT BE EXPLICITLY DROPPED. REASON *reason-code*

Explanation: The DROP statement failed for one of the following reasons, indicated by the *reason-code*:

0001   The DROP TABLE statement attempted to drop a table that resides in a partitioned table space or partition by growth table space.

0002   The DROP INDEX statement attempted to drop an index that was implicitly created by DB2 and DB2 is required to retain the following conditions:
- The primary key constraint on a table
- A unique key constraint on a table
- A referential constraint on a table
- The uniqueness of a ROWID column

A system required index cannot be dropped using the DROP INDEX statement.

0003   The DROP INDEX statement attempted to drop an implicitly created index for a table that contains an XML column.

0004   The DROP TABLE statement attempted to drop a table that was implicitly created for an XML column.

0005   The DROP TABLESPACE statement attempted to drop a table space that was implicitly created for a table containing an XML column.

0006   The DROP statement attempted to drop an auxiliary table, an auxiliary index, or an auxiliary table space that is involved in cloning.

System action: The statement cannot be processed. The object is not dropped.

Programmer response:

Take the appropriate corrective action based on the *reason-code*:

0001   The table of a partitioned table space can only be dropped implicitly when the table space itself is dropped.

0002   If you do not want to keep the primary key, unique key, or referential constraint, use the DROP CONSTRAINT clause of the ALTER TABLE statement to remove the primary key or unique constraint. If the index was created only for enforcing the primary or unique key, then the index will be dropped. If not, the DROP INDEX statement could then be processed. An index for a ROWID column can only be dropped by dropping the table.

0003   The index can only be dropped implicitly when the associated table that contains the XML column is dropped.

0004   The table can only be dropped implicitly when the associated table containing the XML column is dropped.

0005   The table space can only be dropped implicitly when the associated table containing the XML column is dropped.

SQLSTATE: 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. This error can result from one of the following conditions:

Table creation

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.

To correct this situation, either:

- Reduce the row length of the table by reducing the length of one or more of the columns.
- Assign the table to a table space that uses a larger buffer pool.

Table alteration

Two conditions are possible for 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. This table cannot be altered to add columns.
- The statement was issued to alter the length of an existing variable-length column and the new length of the altered column would cause the row length of the table to exceed the page size of the table space.

To correct this situation, reduce the length of the column.

Join result

The row length in the result of a join exceeds the page size of a work file table space. To correct this situation, eliminate columns from the result of the join.

Sort result

The row length of a large sort record exceeds the page size of a work file table space. The sort record includes columns that are being sorted and columns that the user selects. The length of the columns that are being sorted is the sort key length. The length of the columns that the user selects is the sort data length.

To correct this situation, eliminate columns from the SELECT list or reduce the number of columns that are being sorted.

System action: The statement was not executed. The object table was not created or altered.

Programmer response: Correct the error based on the information provided, and reissue the statement.

SQLSTATE: 54010

Related reference

⬚ Statements (DB2 SQL)

-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.

SQLSTATE: 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';
```

SQLSTATE: 55035

-676 **THE PHYSICAL CHARACTERISTICS OF THE INDEX ARE INCOMPATIBLE WITH RESPECT TO THE SPECIFIED STATEMENT. THE STATEMENT HAS FAILED. REASON** *reason-code*

Explanation: A reason code is issued during the processing of a CREATE INDEX or ALTER INDEX statement. When the statement fails, the reason for the failure will be indicated by the *reason code*.

Description:

0001 You specified a buffer pool with a page size other then 4KB in the CREATE or ALTER INDEX statement.

0002 An ALTER INDEX or CREATE INDEX statement results in an invalid combination of a 4KB page size and COMPRESS YES. This reason-code will be issued for the following reasons:

- If you tried to CREATE or ALTER an index, you did not specify a buffer pool having a page size that is supported for index compression. You can only choose a buffer pool with an 8KB, 16KB, or 32KB page size for a compressed index.
- If you tried to ALTER an index using ALTER INDEX with the COMPRESS YES clause, then the existing index is not defined with a buffer pool that has an 8KB, 16KB, or 32KB page size, and therefore, the index cannot be compressed.

0003 The ALTER INDEX statement has resulted in an index that's on-disk page size in incompatible with the CISIZE of the index's underlying non-DB2 managed data set. This reason-code will be issued for the following reasons:

- If the index is not compressed, a 4 KB page size must reside in a data set that has a 4 KB CISIZE. A page size greater than 4KB must have a CISIZE that is either 4KB or equal to the page size.
- If the index is compressed, then the index pages on disk are always 4 KB. The CISIZE for the data set must also be 4KB.

System action: The statement cannot be executed.

Programmer response: Depending on reason-code, take the following action:

0001 Change the buffer pool specification to the name of a buffer pool with a 4KB page size.

0002 Modify the statement so that is does not result in a compressed index with a 4 KB page size.

0003 ALTER the STOGROUP to use a DB2 managed data set or change the CISIZE of the user-managed data set to be compatible with the specified index options. If the index is compressed, the CISIZE must be 4KB. Otherwise, the CISIZE should match the page size or be 4KB.

Refer to chapter 2 of *SQL Reference* for information about the syntax of SQL statements.

SQLSTATE: 53041

-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.

One of the following messages has also been sent to the MVS console: DSNB601I, DSNB603I, or DSNB605I. Refer to *Messages* for explanations of these messages.

SQLSTATE: 57011

-678 **THE CONSTANT** *constant* **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 *constant* 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, *constant* 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 index was not created.

Programmer response: Correct the statement so that each limit key value *constant* is of precisely the same data type as that of the corresponding index key column.

SQLSTATE: 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.

SQLSTATE:　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.

SQLSTATE:　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.

SQLSTATE:　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.

SQLSTATE:　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. *data-item* indicates the source of the problem:

- For a CREATE or ALTER TABLE statement, *data-item* contains the name of the column that cause d the error. The error could be an invalid specification of FOR BIT DATA, FOR SBCS DATA, FOR MIXED DATA, or FIELDPROC for the column definition.
- For a CREATE FUNCTION or CREATE PROCEDURE statement, *data-item* identifies the area of the statement that caused the error. 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.

This error might be issued if you have specified an invalid data type. For example:

- FIELDPROC cannot be specified for columns with DECFLOAT, BIGINT, BINARY, or VARBINARY data types.

This error might also be issued for the following reasons:

- On an ALTER TABLE statement, *generation-alteration* cannot be specified for a column that is not defined as an identity column.
- FIELDPROC cannot be specified for columns with DECFLOAT data types.

System action:　The statement cannot be executed.

Programmer response:　Correct the SQL statement by removing the incompatible specification.

SQLSTATE:　42842

-684 **THE LENGTH OF CONSTANT LIST BEGINNING** *string* **IS TOO LONG**

Explanation: The length of the constant 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.

SQLSTATE: 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.

SQLSTATE: 58002

-686 **COLUMN DEFINED WITH A FIELD PROCEDURE CAN NOT COMPARE 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 2 of *SQL Reference* for comparison restrictions between columns defined with a field procedure.

SQLSTATE: 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 2 of *SQL Reference* for comparison restrictions between columns defined with a field procedure.

SQLSTATE: 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.

SQLSTATE: 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.

SQLSTATE: 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).

SQLSTATE: 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.

SQLSTATE: 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.

SQLSTATE: 57018

-693 THE COLUMN *column-name* IN DDL REGISTRATION TABLE OR 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.

SQLSTATE: 55003

-694 THE SCHEMA 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: Resubmit the job. 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.

SQLSTATE: 57023

-695 INVALID VALUE *seclabel* SPECIFIED FOR SECURITY LABEL COLUMN OF TABLE *table-name*

Explanation: For an insert or an update operation to table *table-name*, the value that was specified for the security label was invalid.

System action: The statement cannot be processed.

Programmer response: Ensure that the value that is specified for the security label column is a valid security label. Alternatively, insert the row that specifies DEFAULT for the security label column, or remove the security label column from the insert column list.

SQLSTATE: 23523

-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.

SQLSTATE: 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.

SQLSTATE: 42899

-713 THE REPLACEMENT 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 *SQL Reference* for an explanation of the valid values of each special register.

SQLSTATE: 42815 or 3F000

-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.

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.

User response: The program cannot be used until the DB2 subsystem is remigrated to the newer release.

SQLSTATE: 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.

SQLSTATE: 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.

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.

User response: The plan or package cannot be used until the DB2 subsystem is remigrated to the newer release.

SQLSTATE: 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.

SQLSTATE: 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. Call the BIND subcommand again, with a 'location.collection.package.version' that is not in use.

SQLSTATE: 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).

SQLSTATE: 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.

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
```

SQLSTATE: 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 action: Package not rebound or freed.

System programmer response: Check the SYSPACKAGE catalog table for the correct 'location.collection.package.version' to use.

SQLSTATE: 42704

-723   **AN ERROR OCCURRED IN A TRIGGERED SQL STATEMENT IN** *trigger-name*. **INFORMATION RETURNED: SQLCODE:** *sql-code*, **SQLSTATE:** *sql-state*, **MESSAGE TOKENS** *token-list*, **SECTION NUMBER** *section-number*

Explanation: During execution of an UPDATE, MERGE, 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 that is 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.

sql-code A numeric value that indicates why the SQL statement execution was unsuccessful. This code is received by the activated trigger.

sql-state The corresponding SQLSTATE for the SQLCODE.

token-list
The list of tokens from the original SQL error. This list might be truncated.

System action: The trigger and the original statement cannot be processed. The triggering table is unchanged.

System programmer response: Identify the failing SQL statement by using one of the following methods:

- Use the trigger name and section number.

- If the trigger definition is available, use the section number.

- Use the following SELECT statement to retrieve the statement from the SYSIBM.SYSPACKSTMT catalog table:

```
SELECT STMT, SEQNO FROM SYSIBM.SYSPACKSTMT
   WHERE COLLID = 'schema-name' AND
   NAME = 'trigger-name' AND
   SECTNOI = section-number
   ORDER BY SEQNO
```

For triggers that were created in DB2 Version 8 new-function mode or later, the STMT result will be in Unicode. To view a Unicode result as EBCDIC, issue the DISPLAY UTF8 command in the ISPF browse program within SPUFI.

| Refer to the explanation of the SQLCODE that is
| indicated by *sql-code* in this code and take the
| appropriate action or actions.

| **Programmer response:** Contact your database
| administrator to determine why the trigger named in
| the message received the error.

| **SQLSTATE:** 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 be 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.

SQLSTATE: 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.

SQLSTATE: 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.

SQLSTATE: 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 *SQL Reference* for more information.

SQLSTATE: 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.

SQLSTATE: 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.

SQLSTATE: 56053

-731 **USER-DEFINED DATASET** *dsname* **MUST BE DEFINED WITH SHAREOPTIONS(1,3)**

Explanation: The VSAM SHAREOPTIONS must be (1,3) for all of the indexes and table spaces in the database. The user-defined data set identified did not meet this requirement.

System action: The statement cannot be executed.

Programmer response: Insure that the data sets used in the shared database are defined with the proper SHAREOPTIONS.

SQLSTATE: 56054

-732 **THE DATABASE IS DEFINED ON THIS SUBSYSTEM WITH THE ROSHARE READ ATTRIBUTE BUT THE TABLE SPACE OR INDEX SPACE HAS NOT BEEN DEFINED ON THE OWNING SUBSYSTEM**

Explanation: Prior to creating a table space or index in a database with the ROSHARE READ attribute, that object must first be defined on the owning subsystem.

System action: The statement cannot be executed.

Programmer response: Verify that the table space or index has been defined on the owning system in a ROSHARE OWNER database.

SQLSTATE: 56055

-733 **THE DESCRIPTION OF A TABLE SPACE, INDEX SPACE, OR TABLE IN A ROSHARE READ DATABASE MUST BE CONSISTENT WITH ITS DESCRIPTION IN THE OWNER SYSTEM**

Explanation: This code is issued while creating a table space, index, or table in the ROSHARE READ database. These objects must be consistent with their descriptions in the ROSHARE OWNER database as follows:

- For a table space, the following attributes must be the same:
  - Page size
  - Segment size
  - Number of partitions
- For an index, the following attributes must be the same:
  - Number of partitions
  - Number of subpages
  - Table OBID
  - Total key length
  - Index type (Type 1 or Type 2 Index)
  - Number of key columns
- For a table, the following attributes must be the same:
  - Table OBID
  - Maximum record length
  - Number of columns
  - Whether an edit procedure exists

System action: The statement cannot be executed.

Programmer response: Ensure that the definition of the table space, index, or table is consistent with that in the ROSHARE OWNER database.

SQLSTATE: 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.

SQLSTATE: 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 processed.

Programmer response: Verify that the correct object is specified on the statement.

SQLSTATE: 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.

SQLSTATE: 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.

SQLSTATE: 56056

-739   CREATE OR ALTER FUNCTION
          function-name FAILED BECAUSE
          FUNCTIONS CANNOT MODIFY
          DATA WHEN THEY ARE PROCESSED
          IN PARALLEL.

Explanation: The function cannot be created or altered 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 processed.

Programmer response: Specify DISALLOW PARALLEL or change the MODIFIES SQL DATA to NO SQL, CONTAINS SQL or READS SQL DATA.

SQLSTATE: 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 operation
*   SET clause of an update operation
*   VALUES statement in a trigger
*   SET Assignment statement
*   CALL procedure statement

System action: The SQL statement failed.

Programmer response: Remove the user-defined function from the failing statement. or remove the MODIFIES SQL DATA option from the definition of the function.

SQLSTATE: 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 can not 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 member. The existing database can be altered or dropped if necessary. If the existing database is dropped, resubmit the CREATE DATABASE statement.

SQLSTATE: 55020

-742   **DSNDB07 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, DSNDB07, 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 DSNDB07 without the WORKFILE clause.

SQLSTATE: 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, UPDATE, or MERGE), 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, UPDATE, or MERGE) in any lower level nesting SQL statement.

System action: The SELECT, INSERT, DELETE, UPDATE or MERGE SQL statement failed.

Programmer response: Remove the failing statement from the named external function, trigger or the stored procedure.

SQLSTATE: 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:

- Use CREATE TABLESPACE to create a LOB table space.
- Use CREATE TABLE to create the auxiliary table for storing the column.
- Use CREATE INDEX to create an index on the auxiliary table.
- Resubmit the statement that failed.

SQLSTATE: 57054

-748   **AN INDEX** *index-name* **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.

SQLSTATE: 54042

-750   **THE SOURCE TABLE** *table-name* **CANNOT BE RENAMED OR ALTERED BECAUSE IT IS REFERENCED IN EXISTING VIEW, MATERIALIZED QUERY TABLE, OR TRIGGER DEFINITIONS, IS A CLONE TABLE, OR HAS A CLONE TABLE DEFINED FOR IT**

Explanation:

The source table *source-name* in a RENAME or ALTER statement could not be processed for one of the following reasons:

- The column is referenced in one or more view definitions.
- The column is referenced as the triggering table in one or more existing triggers.
- The column is referenced in one or more materialized table definitions.
- The column has a check constraint or field procedure defined on it.
- The column has an index on expression defined on it.
- The table has a valid procedure or edit procedure defined on it.
- The table is a clone table.
- The table has a clone table defined for it.
- The ALTER TABLE statement was executed using the ALTER COLUMN clause, and names a table which is referenced by a materialized table query.

| • The ALTER TABLE statement was executed using the SET DEFAULT clause, and names a table which is referenced by a materialized table query or view.

| • The table has a synonym defined for it.

| • The table is defined as an active RLST table.

| • Table *table-name* in a RENAME statement cannot be renamed because it is a materialized query table (MQT).

| • In an ALTER TABLE statement, a column in table *table-name* cannot be renamed for one of the following reasons:

| – The column is referenced in one or more view definitions.

| – The column is referenced in a check constraint.

| – The column has a field procedure defined.

| – The trigger is defined on the table.

| – The valid procedure or edit procedure is defined on the table.

| – An index is defined on the table with an expression that references the column.

| – The definition of one or more materialized query tables references the column.

| • For an ALTER TABLE statement that names a materialized query table, the alterations are limited to the following situations:

| – Changing the materialized query table attributes, or turning the materialized query table to a base table.

| – Using AUDIT, DATA CAPTURE, and ADD or DROP RESTRICT ON DROP clauses (but not both in the same statement).

| • The length of a column in *table-name* cannot be altered because that table is referenced by a materialized query table definition.

System action: The statement cannot be processed.

| **Programmer response:** Change the source name to the name of an object that can be renamed or altered, and reissue the statement.

| Drop any triggers defined on the table before issuing the RENAME statement. These triggers can be found by querying the system catalog: SELECT * FROM SYSIBM.SYSTRIGGERS WHERE TBNAME = 'table-name'. If there is a clone defined on the table, drop the clone table before issuing the RENAME statement.

SQLSTATE: 42986

-751 *object-type object-name* (**SPECIFIC NAME** *specific name*) **ATTEMPTED TO EXECUTE AN SQL STATEMENT** *sql-statement* **THAT IS NOT ALLOWED**

Explanation: A stored procedure or user-defined function attempted to execute an SQL statement that is not allowed.

object-type
    The type of object:

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 either COMMIT or 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
        The external function that is indicated by *object-name* issued either a COMMIT or ROLLBACK statement.

object-name
    The name of the object.

specific-name
    The specific function name, which is unique within the schema.

sql-statement
    The SQL statement that was issued.

System action: The statement cannot be processed.

Programmer response: Either remove all COMMIT and ROLLBACK statements from the stored procedure, or modify the client application so that it establishes an environment that allows the stored procedure to execute statements. Remotely called stored procedures can execute embedded COMMIT or ROLLBACK statements if the following conditions are met:

• The connection with the requester system must use one phase commit protocols.

• The requester system must indicate that commits are allowed by sending a DRDA RDBCMTOK=TRUE indication when the stored procedure is called.

    For DB2 Connect™ requester systems, the client application must use either Connect Type 1 or Remote Unit of Work connections. Other connections cause DB2 Connect to indicate that commits are not allowed, which will cause COMMIT and ROLLBACK statements in a stored procedure to fail.

SQLSTATE: 38003

2F003

Related reference

⤷ COMMIT (DB2 SQL)

⤷ ROLLBACK (DB2 SQL)

-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 *SQL Reference* for an explanation of connection states.

System action: The statement cannot be executed. The connection 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.

SQLSTATE: 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.
- It is a LOB table space and LOGGED was specified, but the associated base table space is defined as NOT LOGGED.

System action: The statement cannot be executed.

Programmer response: Either

- Create the LOB table space in a non-workfile database.
- Create the table in a non-LOB table space.
- Create the auxiliary table in a LOB table space.
- Create a LOB table space and do not specify LOGGED.

SQLSTATE: 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.

SQLSTATE: 560A2

-765   **TABLE IS NOT COMPATIBLE WITH DATABASE**

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 permitted.

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.

SQLSTATE: 560A3

-766   **THE OBJECT OF A STATEMENT IS AN AUXILIARY TABLE FOR WHICH THE REQUESTED OPERATION IS NOT PERMITTED**

Explanation: The statement requested an operation that is not supported for the specified object:

- An auxiliary table for an LOB column must not be specified as the target of the following statements:
  - ALTER TABLE
  - CREATE ALIAS
  - CREATE FUNCTION
  - CREATE SYNONYM
  - CREATE VIEW
  - DELETE
  - DESCRIBE TABLE
  - INSERT
  - MERGE
  - SELECT
  - TRUNCATE
  - UPDATE

  Attributes of an auxiliary table cannot 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, MERGE, CREATE PROCEDURE, or CREATE FUNCTION statement. Data in an auxiliary table can only be accessed through operations on the base table columns. Additionally, do not specify CLUSTER on ALTER TABLE if the table is an auxiliary table.

- An implicitly created table for an XML column must not be specified as the target of the following statements:

– ALTER TABLE

– CREATE ALIAS

– CREATE FUNCTION

– CREATE INDEX

– CREATE SYNONYM

– CREATE TRIGGER

– CREATE VIEW

– DELETE

– DESCRIBE TABLE

– INSERT

– MERGE

– REVOKE

– SELECT

– TRUNCATE

– UPDATE

System action: The statement cannot be processed.

Programmer response: Correct the statement to specify the corresponding base table instead of the specified table and resubmit the statement.

SQLSTATE: 560A4

-767 **MISSING OR INVALID COLUMN SPECIFICATION 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.

SQLSTATE: 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.

Programmer response: Check that 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.

SQLSTATE: 560A5

-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 whether the name of the base table specified in the CREATE AUXILIARY TABLE statement is correct. If it is correct and the table is not partitioned, remove the PART clause from the statement. If it is correct and the table is partitioned, add the PART clause to the statement. If the table name is not correct, correct the name and also check that the correct column name is specified.

SQLSTATE: 53096

-770 **TABLE** *table-name* **CANNOT HAVE A LOB COLUMN UNLESS IT ALSO HAS A ROWID, OR AN XML COLUMN UNLESS IT ALSO HAS A DOCID COLUMN**

Explanation: An attempt was made to create a table with a column that has a dependency on another type of column in the same table. This error can occur in the following situations:

• The statement attempted 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.

• The statement attempted to create a table with an XML column or to add an XML column to a table, but the table does not have a DOCID column. A table with an XML column must also have a DOCID column.

System action: The statement cannot be processed.

Programmer response: If creating a table, define an additional column for the ROWID or DOCID column in the same table. If using ALTER to add the LOB or XML column to a table, first use ALTER to add a column with type ROWID or DOCID to the table.

SQLSTATE: 560A6

-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.
- A ROWID column cannot be specified in a referential-constraint clause as a column of a foreign key.
- A ROWID column cannot be a column of a primary key or unique key.
- A ROWID column cannot be a column in a table with an EDITPROC.
- A ROWID column cannot be part of the implicit or explicit column list for fullselect in the *as-result-table* clause of a CREATE TABLE or DECLARE GLOBAL TEMPORARY TABLE statement.

System action: The statement cannot be executed.

Programmer response: Correct the syntax and resubmit the statement.

SQLSTATE: 428C7

-773   **CASE NOT FOUND FOR CASE STATEMENT**

Explanation: A case statement without an ELSE clause was specified in the body of an SQL routine. None of the conditions specified in the CASE statement were met.

System action: The statement cannot be processed.

Programmer response: Change the CASE statement to handle all of the conditions that can occur.

SQLSTATE: 20000

-776   **USE OF CURSOR *cursor-name* IS NOT VALID**

Explanation: Cursor *cursor-name* is specified as the cursor name on a FOR statement in an SQL procedure. The cursor cannot be specified on a CLOSE, FETCH, or OPEN statement within the FOR statement.

System action: The statement cannot be processed.

Programmer response: Remove the CLOSE, FETCH, or OPEN statement.

SQLSTATE: 428D4

-778   **ENDING LABEL *label-name* DOES NOT MATCH THE BEGINNING LABEL**

Explanation: The label that is specified at the end of a compound, WHILE, REPEAT, or LOOP statement in an SQL routine is not the same as the label at the beginning of the statement. The end label cannot be specified if the begin label is not specified.

label-name
> The name given for the ending label.

System action: The statement cannot be processed.

User response: Ensure that the end label is the same as the begin label for the compound, WHILE, REPEAT, or LOOP statement.

SQLSTATE: 428D5

-779   **LABEL *label* SPECIFIED ON A GOTO, ITERATE, OR LEAVE STATEMENT IS NOT VALID**

Explanation: Label *label* is specified as the target label for a GOTO, ITERATE or LEAVE statement. *label* is not defined, is not defined in a scope that is accessible to the current statement, or to the current statement, or it is not a valid label for the failing statement.

This error can occur with a GOTO, ITERATE or LEAVE statement for one of the following reasons:

- If the failing statement is in a condition handler, then *label* must be defined in that condition handler.
- If the failing statement is not in a condition handler, then *label* must not be defined in a condition handler.

Additionally, this error can be issued for ITERATE or LEAVE statements for one of the following reasons:

- If the failing statement is an ITERATE statement, then *label* must be defined as a label for a FOR, LOOP, REPEAT, or WHILE statement, and the ITERATE statement must be in that FOR, LOOP, REPEAT, or WHILE statement, or in a block of code that is directly or indirectly nested within that statement.
- If the failing statement is a LEAVE statement, then *label* must be defined as a label for a compound, FOR, LOOP, REPEAT, or WHILE statement, and the LEAVE statement must be in that compound, FOR, LOOP, REPEAT, or WHILE statement, or in a block of code that is directly or indirectly nested within that statement.

System action: The statement cannot be processed.

User response: Specify a valid label for the target of the GOTO, ITERATE, or LEAVE statement.

SQLSTATE: 42736

-780   UNDO SPECIFIED FOR A HANDLER

Explanation: In an SQL routine, a compound statement contains an UNDO handler. UNDO handlers are not supported.

System action: The statement cannot be processed.

User response: Change the UNDO handler to a CONTINUE or EXIT handler.

SQLSTATE: 428D6

-781   CONDITION *condition-name* IS NOT
            DEFINED OR THE DEFINITION IS
            NOT IN SCOPE

Explanation: A condition was specified in a handler declaration, SIGNAL, or RESIGNAL statement, but either the condition is not defined in the routine or the reference to the condition name is not in the scope of the declaration of the condition name.

condition-name
        The name of the condition that is not defined.

System action: The statement cannot be processed.

User response: Define the condition using the DECLARE CONDITION statement in a compound statement, and verify that the reference is in the same scope as the declaration. Alternately, you can remove the reference to the condition.

SQLSTATE: 42737

Related reference

➡ compound-statement (DB2 SQL)

-782   A CONDITION OR SQLSTATE
            condition-value SPECIFIED IS NOT
            VALID

Explanation: An SQL routine specified a condition value that is not valid.

condition-value
        Either a specific condition value, which is provided as an SQLSTATE value, or a general condition value, such as SQLEXCEPTION, SQLWARNING, or NOT FOUND.

The condition or SQLSTATE value is not valid for one of the following reasons:

- The handler declaration or condition declaration specifies an SQLSTATE value that is not valid.
- The condition or SQLSTATE value has already been specified by another handler in the same scope.
- The condition or SQLSTATE was specified in the same handler as SQLEXCEPTION, SQLWARNING, or NOT FOUND.

System action: The statement cannot be processed.

User response: Correct the condition or SQLSTATE value.

SQLSTATE: 428D7

-783   SELECT LIST FOR CURSOR
            cursor-name IN FOR STATEMENT IS
            NOT VALID. COLUMN *column-name* IS
            NOT UNIQUE

Explanation: The SELECT list in the FOR statement must contain unique column names. The SELECT list specified either contains duplicate column names or unnamed expressions.

- If two column names are the same, the column name is *column-name*.
- If the problem is the result of unnamed expressions then *N is returned for *column-name*.

System action: The statement cannot be processed.

Programmer response: Specify unique column names in the SELECT list specified in the FOR statement.

SQLSTATE: 42738

-785   USE OF SQLCODE OR SQLSTATE IS
            NOT VALID

Explanation: The use of SQLCODE or SQLSTATE in an SQL routine body is invalid for one of the following reasons:

- SQLCODE is not declared as INTEGER in a return-codes-declaration clause.
- SQLSTATE is not declared as CHAR(5) in a return-codes-declaration clause.
- SQLCODE or SQLSTATE is assigned the value NULL.

System action: The statement cannot be processed.

User response: Correct the parameter list, declaration of an SQLCODE or SQLSTATE variable, or correct the assignment of a value to an SQLCODE or SQLSTATE variable.

SQLSTATE: 428D8

-787   RESIGNAL STATEMENT ISSUED
            OUTSIDE OF A HANDLER

Explanation: The RESIGNAL statement, specified in an SQL procedure, must be specified inside a handler.

System action: The statement cannot be executed.

Programmer response: Remove the RESIGNAL statement or use a SIGNAL statement. Try the request again.

SQLSTATE: 0K000

| **-797** | **THE TRIGGER** *trigger-name* **IS DEFINED 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 MERGE statement
  - a SIGNAL SQLSTATE statement
  - a CALL statement
- An INSTEAD OF 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 MERGE 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.

SQLSTATE: 42987

| **-798** | **A VALUE CANNOT BE SPECIFIED FOR COLUMN** *column-name* **WHICH IS DEFINED AS GENERATED ALWAYS** |

Explanation: When inserting or updating a row in a table, a value was specified for column *column-name* which is defined as GENERATE ALWAYS. GENERATED ALWAYS columns should not be specified in the column list for an insert operation, or in the SET clause for an update operation unless the keyword DEFAULT is specified.

System action: The statement cannot be processed.

Programmer response:

Remove the column from the column list or SET clause, or specify DEFAULT as the column value.

With an INSERT statement, you may also use the OVERRIDING clause as a possible solution for this situation. See INSERT in DB2 SQL Reference for more information about the OVERRIDING USER VALUE clause.

SQLSTATE: 428C9

| **-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
- INVALID OPERATION
- SUBNORMAL
- UNDERFLOW
- OVERFLOW
- 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, MERGE, or DELETE statement.
- In the SET clause of the UPDATE operation.
- Found during the evaluation of an aggregate function.

Data-type might indicate the data types of the items being manipulated. Possible values for *data-type* are BIGINT, 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 might 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, AGGREGATE FUNCTION, and JAVA CONVERSION.

Position-number might indicate the position of the expression in a SELECT list if the error was in the SELECT list of an outer SELECT statement

Parts of *exception-type*, *data-type*, *operation-type*, and *position-number* might 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 operation, 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 an aggregate function (indicated by *operation-type* of AGGREGATE 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 BIGINT, 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 or user-defined function 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 or user-defined function invocation 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.

SQLSTATE: 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* **CONSTRAINS 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.

If the index space is an XML index, the duplicate values can be caused by the values in the XML document or by the result of data type conversion and rounding.

System action: The statement cannot be processed.

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 operation, 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 operation, 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.

SQLSTATE: 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.

SQLSTATE: 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. **Attention:** The following three tokens are involved with the causes for the issuance of this message:

- *location-name.collection-id.dbrm-name.consistency-token*
- *plan-name*
- *reason*

The *collection-id* is blank (*location-name.collection-id.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.

| – DB2 private protocols are not supported under the bind parameter.

| Application conditions:
| – The CURRENT PACKAGESET special register was not set correctly by the application.
| – The application was not connected to the proper location.

| When using SET CURRENT PACKAGESET = :HV, be sure to use the correct encoding scheme, that matches with the :HV in ZPARM options. This statement does not require package or DBRM bound into the plan, so it uses the encoding scheme defined for system. The same applies to SET CURRENT PACKAGE PATH.

- 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.

| In a native SQL procedure, if the affected SQL statement follows a SET CURRENT PACKAGESET, SET CURRENT PACKAGE PATH, CONNECT statement, or if it refers to an object on a remote server, additional package or packages will need to be bound via BIND COPY. Whenever the native SQL procedure is changed such that a regeneration is needed, the additional package also needs to be bound with the copy option.

System action: The statement cannot be executed.

Programmer response: Based on the above reasons, 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.

| If this error is issued for one of the situations described for a native SQL procedure, use BIND COPY to bind the additional packages.

Problem determination: The following queries aid in determining the problem. Run these queries at the local location.

- 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.

  ```
  SELECT PLCREATOR, PLNAME, NAME, VERSION
  FROM SYSIBM.SYSDBRM
  WHERE PLNAME = 'plan-name';
  ```

- 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.

  ```
  SELECT LOCATION, COLLID, NAME
  FROM SYSIBM.SYSPACKLIST
  WHERE PLANNAME = 'plan-name';
  ```

- This query displays the CURRENTSERVER value specified on the BIND subcommand for the plan.

  ```
  SELECT NAME, CURRENTSERVER
  FROM SYSIBM.SYSPLAN
  WHERE NAME = 'plan-name';
  ```

- 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.

```
SELECT COLLID, NAME, HEX(CONTOKEN), VERSION
FROM <location-name.>SYSIBM.SYSPACKAGE
WHERE NAME = 'dbrm-name'
AND HEX(CONTOKEN) = 'consistency-token';
```

- 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.

```
SELECT COLLID, NAME, HEX(CONTOKEN), VERSION
FROM <location-name.>SYSIBM.SYSPACKAGE
WHERE NAME = 'dbrm-name'
AND HEX(CONTOKEN) = 'consistency-token'
AND COLLID = 'collection-id';
```

SQLSTATE: 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.

SQLSTATE: 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.

SQLSTATE: 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.

SQLSTATE: 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.

SQLSTATE: 22508

-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, CICS, or RRSAF 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, MERGE, 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, CICS, or RRSAF 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 connection to the remote system is through VTAM®, ensure that the VTAM APPL statement specifies SYNCLVL=SYNCPT. See the discussion of the VTAM APPL statement in *Installation Guide*.

If the error is due to an invalid statement during a trigger activation, contact your system administrator to correct the trigger definition.

SQLSTATE: 25000

-818 **THE PRECOMPILER-GENERATED TIMESTAMP** x **IN THE LOAD MODULE IS DIFFERENT FROM THE BIND TIMESTAMP** y **BUILT FROM THE DBRM** z

Explanation: The timestamp that is stored in the application load module does not match the timestamp that is stored in the plan or package. If the timestamps do not match, the application is not allowed to process the SQL statement.

x The timestamp that was generated by the precompiler. This timestamp is a DB2 internal timestamp. It does not have an external interpretation.

y The bind timestamp. This timestamp is a DB2 internal timestamp. It does not have an external interpretation.

z The name of the database request module (DBRM).

The SQL precompiler places timestamp y in the DBRM and timestamp x in the parameter list in the application program for each SQL statement. At bind time, DB2 stores the DBRM timestamp for runtime 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 operation.

This problem can occur in the following cases:
- The application was precompiled, compiled, and linked, but was not bound.
- The application was precompiled and bound, but was not compiled and linked for the application program.
- The application was bound 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.

System action: The statement is not processed.

Programmer response: Bind the application again, using the DBRM for the application program that matches the load module.

SQLSTATE: 51003

Related concepts

⇨ DB2 program preparation overview (Application programming and SQL)

Related reference

⇨ BIND PACKAGE (DSN) (DB2 Commands)

⇨ BIND PLAN (DSN) (DB2 Commands)

-819   **THE VIEW CANNOT BE PROCESSED BECAUSE THE LENGTH OF ITS PARSE TREE IN THE CATALOG IS ZERO**

Explanation: SYSIBM.SYSVTREE.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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

SQLSTATE: 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 fallback, -820 is a system error. If you suspect an error in DB2, refer to Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

SQLSTATE: 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.

SQLSTATE: 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.

SQLSTATE: 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.
- A CONNECT (type 2) request that includes the USER/USING clause identifies an existing SQL connection.

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.
- Destroy the connection (by using the RELEASE statement in a previous unik of work) before executing the CONNECT statement which includes the USER/USING clause.

Correct the error in the application, rebind the plan or package, and resubmit the job.

SQLSTATE: 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.

SQLSTATE: 08003

-845 **A PREVIOUS VALUE EXPRESSION CANNOT BE USED BEFORE THE NEXT VALUE EXPRESSION GENERATES A VALUE IN THE CURRENT APPLICATION PROCESS FOR SEQUENCE** *sequence-name*

Explanation: A PREVIOUS VALUE expression specified sequence *sequence-name*, but a value has not

yet been generated for this sequence. A NEXT VALUE expression must be issued in this application process to generate a value for this sequence before a PREVIOUS VALUE expression for the sequence can be issued.

This error can also occur after a sequence has been dropped, and the DROP statement is rolled back.

System action: The statement cannot be executed.

Programmer response: Issue at least one NEXT VALUE expression for a sequence before issuing any PREVIOUS VALUE expression for the same sequence in a connection.

SQLSTATE: 51035

-846 **INVALID SPECIFICATION OF AN IDENTITY COLUMN OR SEQUENCE OBJECT** *object_type object_name*. **REASON CODE =** *reason_code*

Explanation: For an identity column or sequence, the specification of an attribute in a CREATE or ALTER statement might be invalid for one of the following reasons:

1 The underlying data type of the identity column or sequence object is not supported. Identity columns and sequence objects support the following data types: SMALLINT, INTEGER, BIGINT, and DECIMAL (or NUMERIC) with a scale of zero.

2 The value for START WITH, INCREMENT BY, MINVALUE, MAXVALUE, or RESTART WITH is outside the range for the data type of the identity column or sequence object. If the sequence being altered is DSNSEQ_IMPLICITDB, the value for MAXVALUE is outside the range between 1 and 60000, inclusive.

3 MINVALUE must be less than or equal to MAXVALUE.

5 An edit procedure was specified for the identity column.

6 An identity column was specified for a global temporary table that was already defined by a CREATE GLOBAL TEMPORARY TABLE statement. This error could occur for a CREATE GLOBAL TEMPORARY TABLE statement, or an ALTER TABLE statement for a global temporary table when there is an attempt to add an identity column to an existing global temporary table that was already defined by a CREATE GLOBAL TEMPORARY TABLE statement.

System action: DB2 cannot process the statement.

Programmer response: Correct the syntax and resubmit the statement.

SQLSTATE: 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.

If more than one exchange is attempted consecutively, then there must be a COMMIT between them. This COMMIT is already required before DML can be done. If a COMMIT is not done between exchanges, then a -909 SQL code will be issued.

System action: The statement cannot be executed.

Programmer response: Correct the syntax and resubmit the statement.

SQLSTATE: 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.

SQLSTATE: 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, EBCDIC CODED CHAR SET, or UNICODE 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.

SQLSTATE: 51032

-873   **THE STATEMENT REFERENCED DATA ENCODED WITH DIFFERENT ENCODING SCHEMES OR CCSIDS IN AN INVALID CONTEXT**

Explanation: The SQL statement referenced data from multiple encoding schemes or CCSIDs in a context where the reference is not allowed. This error can occur for one of the following reasons:

- The definition of a new table is specified to be 'like' an existing view which references data from multiple encoding schemes.
- The parent and child tables referenced in the definition of a referential constraint containing one or more non-numeric columns are encoded with different encoding schemes.
- The definition of a materialized query table uses a different encoding scheme than the containing table space.
- The SELECT statement references data encoded in multiple encoding schemes, and also contains an INSERT statement that references data encoded with a single encoding scheme. This situation is not allowed so that an INSERT statement is processed the same way whether or not it is contained within a SELECT statement.

System action: The statement cannot be executed.

Programmer response: Correct the SQL statement.

SQLSTATE: 53090

-874   **THE ENCODING SCHEME SPECIFIED FOR THE *object-type* MUST BE THE SAME AS THE CONTAINING TABLE SPACE OR OTHER PARAMETERS**

Explanation: If CCSID ASCII was specified, then the containing table space is EBCDIC or UNICODE. If CCSID EBCDIC was specified, then the containing table space is ASCII or UNICODE. If CCSID UNICODE was specified, then the containing table space is ASCII or EBCDIC.

The encoding scheme of a table must be the same as the table space which contains the table.

If a table is created using a fullselect, then the following must be the same:

- The encoding scheme of the result table of the fullselect
- The encoding scheme in the CCSID clause (if specified)
- The encoding scheme of the target table space

System action: The statement cannot be executed.

Programmer response: Correct the SQL statement.

SQLSTATE: 53091

-875 *operand* **CANNOT BE USED WITH THE ASCII DATA REFERENCED**

Explanation: ASCII data was referenced in one of the following situations:

- A LIKE predicate refers to a mixed data column in an ASCII table. The LIKE predicate is not supported for mixed ASCII data.
- A VARGRAPHIC function was specified for a column in an ASCII table. The VARGRAPHIC function is not supported for ASCII data.

System action: The statement cannot be executed.

Programmer response: Correct the SQL statement.

SQLSTATE: 42988

-876 *object* **CANNOT BE CREATED OR ALTERED, REASON** *reason*

Explanation: The object, *object*, cannot be created in the SQL statement.

Possible values for *object*:

TYPE 1 INDEX
    The object being created is a type 1 index.

INDEX The object being created is an index.

TABLE The object being created or altered is a table.

TABLESPACE
    The object being altered is a table space.

Possible values for *reason*:

TABLE DEFINED AS ASCII
    The underlying table is defined as ASCII. Only type 2 indexes are supported for ASCII tables.

PIECESIZE IS NOT VALID
    PIECESIZE is only valid for non-partitioned indexes.

COLUMN NAME IN EBCDIC EXCEEDS 18 BYTES, OR THE CONVERSION FROM UNICODE TO EBCDIC FAILED
    The table being created or altered has an EDITPROC, FIELDPROC, or VALIDPROC, in which case the column name in EBCDIC cannot exceed 18 EBCDIC bytes in length, or the conversion of a column name from UNICODE to EBCDIC failed.

BASE TABLESPACE IS LOG YES, LOB TABLESPACE IS LOG NO
    A spatial index cannot be created because the table space which contains base table is LOG YES, but the LOB table space which stores the LOB column is LOG NO.

CONTAINS A SPATIAL COLUMN
    A LOB table space cannot be altered from LOG YES to LOG NO if there is an index depends on the LOB column.

    A table space cannot be altered from LOG NO to LOG YES if it contains a table which has an index depends on a LOB column of the table.

System action: The statement cannot be executed.

Programmer response: Correct the SQL statement for the object being created.

SQLSTATE: 53092

-877 **CCSID ASCII OR CCSID UNICODE 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 or CCSID UNICODE clause from the statement.

SQLSTATE: 53093

-878 **THE PLAN_TABLE USED FOR EXPLAIN CANNOT BE ASCII**

Explanation: A plan table was encoded in the wrong format. It must be encoded in EBCDIC or Unicode for use with EXPLAIN.

System action: The statement was not executed.

Programmer response: Drop the existing plan table, and create a new one with the either EBCDIC or Unicode encoding.

SQLSTATE: 53094

-879 **CREATE or ALTER STATEMENT FOR** *obj-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 scheme.

- A CREATE, with CCSID UNICODE clause specified, cannot be processed because the proper level of OS/390® is not installed. Refer to the Program Directory for information on the level of OS/390 required for UNICODE support.

- A CREATE DISTINCT TYPE statement cannot define a distinct type, on EBCDIC or ASCII data, 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, for ASCII or EBCDIC data, as CHAR FOR MIXED DATA, or GRAPHIC, VARGRAPHIC, or DBCLOB, when the MIXED DATA install option is set to NO.

Note: This error only occurs when the encoding scheme in use is EBCDIC or ASCII. The MIXED DATA install option does not affect Unicode data.

Note: This error can occur when there is an attempt to define a column or parameter as character FOR MIXED DATA even though the keywords FOR MIXED DATA do not appear in the failing statement. This occurs when the MIXED value in DECP is YES, in this case the default subtype for the character types is FOR MIXED DATA.

System action: The statement cannot be processed.

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.

SQLSTATE: 53095

-880   **SAVEPOINT** *savepoint-name* **DOES NOT EXIST OR IS INVALID IN THIS CONTEXT**

Explanation: The RELEASE TO SAVEPOINT or ROLLBACK TO SAVEPOINT statement does not identify a savepoint that exists.

System action: DB2 does not process the statement.

Programmer response: Correct the statement to use a valid savepoint name.

SQLSTATE: 3B001

-881   **A SAVEPOINT WITH NAME** *savepoint-name* **ALREADY EXISTS, BUT THIS SAVEPOINT NAME CANNOT BE REUSED**

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.

SQLSTATE: 3B501

-882   **SAVEPOINT DOES NOT EXIST**

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.

SQLSTATE: 3B502

-900   **THE SQL STATEMENT CANNOT BE EXECUTED BECAUSE THE APPLICATION PROCESS IS NOT CONNECTED TO A SERVER**

Explanation: A previous failure has placed the application process in the unconnected state. An unsuccessful request to switch the user in a trusted connection can cause the connection to go into an 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 processed.

Programmer response: It is possible that no response is required because checking for -900 is one way of detecting the unconnected state. If this error is the result of another situation, the logic of the application program must be changed. For additional information, see the description of the CONNECT statement in chapter 2 of *SQL Reference* .

SQLSTATE: 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.

SQLSTATE: 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.

SQLSTATE: 58005

-904   **UNSUCCESSFUL EXECUTION CAUSED BY AN UNAVAILABLE RESOURCE. REASON** *reason-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 Appendix F, "Resource types," on page 883 for an explanation of resource type codes.

If this is issued in connection with Multilevel Security

authorization (resource-type 402), then the Security Server return and reason codes for the unavailable resource appear as the *resource-name*. In this case, refer to the *z/OS Security Server RACROUTE Macro Reference*.

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*.

SQLSTATE: 57011

-905   **UNSUCCESSFUL EXECUTION DUE TO RESOURCE LIMIT BEING EXCEEDED, RESOURCE 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 SYSIBM.SYSROUTINES 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 trace 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 statement 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.

SQLSTATE: 57014

-906   THE SQL STATEMENT CANNOT BE EXECUTED BECAUSE THIS FUNCTION IS DISABLED 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 DSNCEXT1, 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.

SQLSTATE: 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 subcommand 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, rebind the package before reexecuting the package.

SQLSTATE: 23510

-909   THE OBJECT HAS BEEN DELETED OR ALTERED

Explanation: The application program has performed one of the following actions:

- Dropped or altered a table and then accessed it.
- Dropped or altered an index and then accessed the table on which the index was defined.
- Executed the EXCHANGE statement on a table more than once without executing a COMMIT statement between consecutive EXCHANGE statements.

System action: The statement cannot be executed.

System programmer response: Correct the application program in one of the following ways:

- Do not drop or alter a table, and then access it in the same application program.
- Do not drop or alter an index, and then access the table on which it is defined in the same application program.
- If the application program contains consecutive EXCHANGE statements for a table, include a COMMIT statement between the EXCHANGE statements.

SQLSTATE: 57007

-910   THE SQL STATEMENT CANNOT ACCESS AN OBJECT ON WHICH UNCOMMITTED CHANGES ARE PENDING

Explanation: The application program attempted to access an object that has been modified and the changes have not yet been committed. This error is issued in the following situations:

- When an application program issues a data definitional statement (DROP, ALTER, CREATE, or RENAME) against an object, and then attempts to access that object before the operation is complete.
- When the application program issues an ALTER or CREATE statement, and a data manipulative statement (such as INSERT, UPDATE, DELETE, MERGE, or SELECT) is processed for the same object, in the same commit scope.

System action: The statement cannot be executed.

Programmer response: Modify the logic of the application program, other than the logic for DROP, so that a COMMIT (or the IMS or CICS equivalent) is executed between the data definitional statement and the failing SQL statement, or between the data manipulative statement and the data definitional statement. In cases where open held cursors are associated with the failing SQL statement, the cursor must be closed prior to COMMIT.

For DROP, the logic of the application program should be modified so that no attempt is made to access an object after the DROP has been executed. **Attention:** DROP includes cases when rollback to a savepoint includes rolling back to a CREATE.

SQLSTATE: 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. For more information, refer to the explanation of message DSNT500I in *Messages*. Refer to Appendix F, "Resource types," on page 883 for an explanation of resource type codes.

Attention: 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

The changes associated with the unit of work must be entered again.

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 Part 4 of *Application Programming and SQL Guide* .

SQLSTATE: 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.

For more information, refer to the explanation of message DSNT500I in *Messages*. Refer to Appendix F, "Resource types," on page 883 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 IMS, CICS, and TSO handle deadlocks, see Part 4 of *Application Programming and SQL Guide* .

SQLSTATE: 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.

SQLSTATE: 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.

SQLERRP contains the name of the module that detected the previous failure and placed the application in the must-abort state.

SQLSTATE: 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.

- The unit of work is part of a Global Transaction, and another unit of work in the Global Transaction has initiated a ROLLBACK. All units of work in the Global Transaction must now ROLLBACK.

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.

SQLERRP contains the name of the module that detected the previous failure and placed the application in the must-abort state.

SQLSTATE: 56045

-922 AUTHORIZATION FAILURE: *error-type* **ERROR. REASON** *reason-code*

Explanation: Authorization failed because of the error indicated by *error-type*

error-type
    Types of authorization failure
    - User authorization
    - Plan access
    - Duplicate exit requested
    - Installation error
    - Connect

reason-code
    DB2 reason code associated with authorization failure

System action: The statement cannot be processed. The connection to DB2 is not established.

Programmer response: If *error-type* is *user authorization:*, the authorization-ID specified to DB2 through your attachment facility is not valid for DB2. See your system programmer or your CICS, IMS, or TSO system administrator.

If *error-type* is *plan access*, then the authorization ID associated with this connection is not authorized to use the specified plan name or the specified plan name does not exist. See your system administrator.

If *error-type* is *duplicate exit*, then you requested a duplicate exit.

If *error-type* is *installation error*, a connection or sign-on exit denied your request. See your system programmer.

If *error-type* is *Connect*, an SQL CONNECT request failed to connect to the local DB2 with USER/USING specified. See the reason code for a description of the failure. The application program has been placed in the connectable and unconnected state. The only SQL statements that can be successfully completed in this state are CONNECT, COMMIT, ROLLBACK, and local SET statements. Any attempt to execute other SQL statements will result in an error (SQLCODE -900).

The reason code is described in *Codes*. Any attempts to issue SQL statements following the -922 SQLCODE when *error-type* is not *Connect* cause unpredictable results.

SQLSTATE: 42505

-923   CONNECTION NOT ESTABLISHED: **DB2** *condition* **REASON** *reason-code*, **TYPE** *resource-type*, **NAME** *resource-name*

Explanation: The connection to DB2 failed for the reason indicated by *condition*, which can be any of the following:

- DB2 not up
- DB2 not operational
- DB2 shutdown in progress
- DB2 restricted access mode
- Allocation error
- DB2 - CICS attachment not up
- DB2 - CICS ENTRY disabled
- The object is dependent on facilities of a release of DB2 that is newer than the release that you are currently running (fall back).
- DB2 restarted in light mode

Possible causes of an allocation error are:

- The application plan does not exist.
- The application plan is inoperative. An explicit REBIND or BIND is required.
- The application plan is invalid. Underlying resources have changed.
- A required database, table space, table, or index is unavailable.
- Data set allocation failed for a required data set.
- There is insufficient virtual storage.
- The application is trying to execute the plan from a system (environment) that was restricted when the plan was bound or rebound. Check the SYSPLSYSTEM 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.

Refer to message DSNT500I in *Messages* for an explanation of resource type and resource name. Refer to Appendix F, "Resource types," on page 883 for an explanation of resource type codes. Any attempts to issue SQL statements after receiving SQLCODE -923 will cause unpredictable results.

SQLSTATE: 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: The reason code is described in *Codes*. 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.

SQLSTATE: 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 RRS 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.

SQLSTATE: 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 RRS
protocols should be used to roll back work in these
environments.

SQLSTATE: 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.

SQLSTATE: 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.

SQLSTATE: 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.

SQLSTATE: 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.

SQLSTATE: 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.

SQLSTATE: 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.

SQLSTATE: 42705

-951 **OBJECT** *object-name* **OBJECT TYPE** *object-type* **IS IN USE AND CANNOT BE THE TARGET OF THE SPECIFIED ALTER STATEMENT**

Explanation: The options for the SQL routine cannot be altered if the version of the routine is currently active under the same thread that issued the ALTER statement, and one or more of the options that is being altered result in the rebinding or regeneration of the package for the SQL routine.

object-name
> The name of the object.

object-type
> The type of object.

If the failing statement was either ALTER PROCEDURE ACTIVATE VERSION or ALTER FUNCTION ACTIVATE VERSION, the active version of a currently active SQL routine under nested routine invocation by the same thread cannot be changed.

System action: The statement cannot be processed.

Programmer response: Review the information about altering routine options and which alterations result in the rebinding or regeneration of associated packages.

Verify that the logic for nested routine invocation involving SQL routines and the ALTER statements are working as intended. Pay additional attention to CALL :HV statements with the setting of special register CURRENT ROUTINE VERSION, as the combination of these statements can produce unwanted logic flows. If it is necessary to use multiple versions of the same SQL routine in the nested recursive chain, consider using CALL :HV and the special register CURRENT ROUTINE VERSION to control which version is used, instead of the ALTER ACTIVATE VERSION clause.

SQLSTATE: 55007

Related reference

↪ ALTER PROCEDURE (SQL - native) (DB2 SQL)

-952 **PROCESSING WAS INTERRUPTED BY A CANCEL REQUEST FROM A CLIENT PROGRAM**

Explanation: A client program issued a cancel request that terminated processing of the SQL statement.

System action: The SQL statement was terminated and any changes made by that statement have been undone. If an SQL cursor is associated with the interrupted SQL statement, that cursor is closed.

SQLSTATE: 57014

| -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: The reason code is described in *Codes*. Correct the error in the application, REBIND, and run the application again.

SQLSTATE: 57015

| -989 | AFTER TRIGGER *trigger-name* ATTEMPTED TO MODIFY A ROW IN TABLE *table-name* THAT WAS MODIFIED BY AN SQL DATA CHANGE STATEMENT WITHIN A FROM CLAUSE |

Explanation:

An SQL data change statement was specified in the FROM clause where FINAL TABLE was specified, but the underlying target base table of the SQL data change statement has an AFTER trigger defined which modifies the same table. This is disallowed.

System action: The statement cannot be processed.

Programmer response:

Avoid using the SQL data change statement within a FROM clause, or change the trigger so that it does not modify the table that is the target of the SQL data change statement.

SQLSTATE:: 57058

| -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.

SQLSTATE: 57015

| -992 | PACKAGE *package-name* CANNOT BE EXECUTED OR DEPLOYED ON LOCATION *location-name* |

Explanation: A mismatch in DB2 code levels prevents the package from being executed or deployed.

package-name
        The name of the package.

location-name
        The DB2 system where the deployment or execution was attempted.

One of the following conditions has occurred:

- The package cannot be executed or deployed because of a mismatch in the level of the DB2 code between the system identified by *location-name* and the current server. The current server and the system identified by *location-name* might be the same system.
- The representation of an SQL routine cannot be executed on the system. The package was bound at a different release or maintenance level than the system can support.

Deployment is the process of establishing an SQL routine at a remote location without regenerating the representation of that routine. The deployment requires that the remote server be able to understand the structures generated by the current server for the identified package. The difference in code level between the current server and the remote location makes this impossible. The difference might be in release levels or maintenance levels, but it is large enough that the package cannot be deployed from the current server to the remote location.

This condition might be specific to this particular package. Other packages might successfully be executed on this system or deployed from the current server to the remote location.

System action: The statement cannot be processed.

Programmer response: If this condition occurs when deploying a SQL routine, try again after DB2 at *location-name* is updated to the release or maintenance level that can support the package that is being deployed.

If this condition occurs in contexts other than deployment (for example, a package that was created prior to application of a PTF is no longer supported by the level of DB2 after the application of that PTF), then execute the ALTER PROCEDURE or ALTER FUNCTION statement with the REGENERATE clause for that version of the SQL routine at the current server

| to regenerate the package using the current maintenance level. The ALTER PROCEDURE or ALTER FUNCTION statement with the REGENERATE clause will cause a rebind of the package at the local server.

| If the SQL routine required package replication at different servers, the process must be repeated for the regenerated SQL routine.

| If variations of the package have been created locally with different collection IDs, those additional packages should also be explicitly rebound.

| **SQLSTATE:** 51008

-1403   **THE USERNAME AND/OR PASSWORD SUPPLIED IS INCORRECT**

Explanation: The username and/or password supplied is incorrect. If either a username or password is supplied, then both must be supplied and both must have a non-zero length.

System action: The statement cannot be executed.

User response: Supply the correct username and password combination.

SQLSTATE: 08004

-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.

SQLSTATE: 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.

SQLSTATE: 53089

-4302   **JAVA STORED PROCEDURE OR USER-DEFINED FUNCTION** *routine-name* **(SPECIFIC NAME** *specific-name***) HAS EXITED WITH AN EXCEPTION** *exception-string*

Explanation: User-defined function or stored procedure *routine-name* exited with a Java exception that was not a java.sql.SQLException.

If present, *exception-string* contains as much as will fit of the toString() of the exception that was uncaught.

System action: Execution of the SQL statement is terminated.

Programmer response: The user-defined function or stored procedure probably needs to be corrected. See your database administrator, or the author of the routine to find out if the exception can be avoided, or if the user-defined function or stored procedure needs to be fixed before it can be used.

SQLSTATE: 38000

| **-4700**   **ATTEMPT TO USE NEW FUNCTION BEFORE NEW FUNCTION MODE**

| **Explanation:** Functions that this release of DB2 introduces cannot be used before new function mode has been enabled. An attempt was made to execute one of these functions.

| To use the new functions that have been introduced in this release of DB2, new-function mode must first be enabled. This error code will be given after an attempt to use a new function before new-function mode has been enabled.

| **System action:** The statement cannot be executed.

| **Programmer response:** Either delay running your program until new-function mode has been enabled, or restrict your program to functions that are allowed before new-function mode is enabled.

| **SQLSTATE:** 56038

| -4701 | THE NUMBER OF PARTITIONS, OR THE COMBINATION OF THE NUMBER OF TABLE SPACE PARTITIONS AND THE CORRESPONDING LENGTH OF THE PARTITIONING LIMIT KEY EXCEEDS THE SYSTEM LIMIT |

Explanation: The intended operation would exceed permitted limits.

- If an ALTER TABLE or CREATE INDEX statement was used to change or create limit keys, the length of the partitioning limit key exceeds the allowed maximum.

- If an ALTER TABLE statement was used to add partitions, the maximum number of partitions already exist.

System action: The statement was not executed.

Programmer response: Correct the problem and reissue the statement.

Adding or changing limit keys

> Decrease the size of limit key or the number of table space partitions to satisfy the constraint.

> The combination of the number of table space partitions and the corresponding limit key size are subject to the following limit:

> $a \times (106 + b) < 65\ 394$

> *a*   The number of partitions.

> *b*   The limit key size, in bytes.

Adding partitions

> For non-large table spaces, the limit is 8, 16, 32, or 64, depending on the initial definition. For large table spaces, see the information about limits in DB2 for z/OS.

SQLSTATE: 54054

Related reference

- ⇨ ALTER TABLE (DB2 SQL)

- ⇨ CREATE INDEX (DB2 SQL)

- ⇨ CREATE TABLESPACE (DB2 SQL)

- ⇨ ALTER TABLESPACE (DB2 SQL)

- ⇨ Limits in (DB2 SQL)

| -4702 | THE MAXIMUM NUMBER OF ALTERS ALLOWED HAS BEEN EXCEEDED FOR *object-type* |

Explanation: The ALTER statement cannot be processed because the maximum number of alters for the object has already been exceeded. This can occur for the following reasons:

- The SET DATA TYPE keyword was specified on an ALTER TABLE ALTER COLUMN statement, but the maximum number of ALTER statements for this table has already been reached.

- The statement attempts to alter an index, but the maximum number of ALTER statements for this index has already been reached.

System action: The statement cannot be executed.

Programmer response: Run MODIFY to instruct DB2 that copies of a certain age will no longer be employed in recovery, and versions only used in those copies can be reused.

SQLSTATE: 54055

| -4703 | THE ALTER TABLE STATEMENT CANNOT BE EXECUTED BECAUSE COLUMN *column-name* IS MIXED DATA, OR THE DATA TYPE OR LENGTH SPECIFIED DOES NOT AGREE WITH THE EXISTING DATA TYPE OR LENGTH |

Explanation: The ALTER TABLE statement for column *column-name* could not be processed for one of the following reasons:

- the existing column is MIXED and the statement attempted to convert the column to SBCS. This conversion is not supported.

- the data type or length in the ALTER statement did not match the existing data type or length of the column in the table being altered.

System action: The statement cannot be executed

Programmer response: Correct the SQL statement to specify a conversion that is supported.

SQLSTATE: 429BQ

| -4704 | AN UNSUPPORTED DATA TYPE WAS ENCOUNTERED AS AN INCLUDE COLUMN |

Explanation: An unsupported data type was specified in the include-column specification. Please refer to the include-column specification in chapter 5 of *SQL Reference*.

System action: The statement cannot be executed

Programmer response: Change the statement to exclude the unsupported datatype.

SQLSTATE: 56084

| -4705 | *option* SPECIFIED ON ALTER PROCEDURE FOR PROCEDURE *routine-name* IS NOT VALID |

Explanation: An ALTER PROCEDURE statement for

an SQL procedure on an option that is not valid for the type of procedure.

option The invalid option.

routine-name
          The name of the routine.

Two types of SQL procedures exist: native SQL procedures and external SQL procedures. The options that can be specified when altering an SQL procedure depend on the type of the SQL procedure being changed.

System action: The statement cannot be processed.

User response: Review the appropriate ALTER statement to determine which options can be changed for the specified object, correct the syntax, and reissue the statement.

SQLSTATE: 530A3

Related reference

➦ Statements (DB2 SQL)

-4706 **ALTER PROCEDURE STATEMENT CANNOT BE PROCESSED BECAUSE THE OPTIONS IN EFFECT (ENVID** *current-envid***) ARE NOT THE SAME AS THE ONES THAT WERE IN EFFECT (ENVID** *defined-envid***) WHEN THE PROCEDURE OR VERSION WAS FIRST DEFINED**

Explanation: The ALTER statement attempted to alter a version of a routine when the environment settings in effect at the time of the ALTER statement were not the same as when the version of the routine was first defined.

current-envid
          The environment settings that are in effect at
          the time of the ALTER statement.

defined-envid
          The environment settings that were in effect
          when the routine was first defined.

To alter a version of a routine, the environment settings that are in effect when the ALTER PROCEDURE or ALTER FUNCTION statement is issued must be the same as the environment settings that were in effect when the version of the routine was first defined (either with a CREATE or ALTER statement for the SQL routine) if any of the following options are specified as part of the statement's *option-list* clause:

• QUALIFIER

• PACKAGE OWNER

• WLM ENVIRONMENT FOR DEBUG MODE

• OPTHINT

• SQL PATH

• DECIMAL if the value includes a comma

System action: The statement cannot be processed.

User response: Specify the name of a routine that was created with the same environment settings in effect as the current settings, or do not specify the options named above.

SQLSTATE: 530A4

Related reference

➦ Statements (DB2 SQL)

-4707 **STATEMENT** *statement* **IS NOT ALLOWED WHEN USING A TRUSTED CONNECTION**

Explanation: The *statement* was issued from a session that is using a trusted connection. This statement is not supported with trusted connections. The *statement* can be CREATE SYNONYM.

System action: The statement cannot be processed.

Programmer response: Change the statement to one that is supported when running under a trusted connection.

SQLSTATE: 429BY

-4708 **TABLE** *table-name* **CANNOT BE DEFINED AS SPECIFIED IN THE** *statement* **STATEMENT IN A COMMON CRITERIA ENVIRONMENT**

Explanation: A CREATE, DECLARE, or ALTER statement attempted to define a new table or change an existing table in a Common Criteria environment, but the specification is not valid for one of the following reasons:

• A CREATE TABLE statement included an explicit list of column definitions, but did not include a security label column. In a Common Criteria environment each table must be defined with a security label column.

• A CREATE TABLE statement included a LIKE clause or AS FULLSELECT clause with the WITH NO DATA clause, to define a new base table. The LIKE clause and AS FULLSELECT fullselect clauses are not supported in a Common Criteria environment.

• A CREATE TABLE statement included an AS fullselect clause to define a materialized query table, and the WITH NO DATA clause was not specified. Materialized query tables are not supported in a Common Criteria environment.

• A DECLARE GLOBAL TEMPORARY TABLE statement included a LIKE clause, or AS FULLSELECT clause with the WITH NO DATA clause to define a new temporary table. The LIKE clause and AS FULLSELECT clauses are not supported in a Common Criteria environment.

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- An ALTER TABLE statement attempted to change a table to a materialized query table. Materialized query tables are not supported in a Common Criteria environment.

System action: The statement cannot be processed.

Programmer response: Change the statement so that it is valid in a Common Criteria environment.

- For a CREATE TABLE statement that includes a lit of column definitions, if the statement is issued in a Common Criteria environment (DSN6SPRM COMCRIT=YES), then every table created must have a security label. Designate a column AS SECURITY LABEL or change the subsystem parameter.

- For a CREATE or DECLARE statement that includes a LIKE or AS FULLSELECT clause, remove the clause and explicitly specify the desired attributes of the table being defined.

- Do not issue a CREATE or ALTER TABLE statement that attempts to define a materialized query table in a Common Criteria environment.

SQLSTATE: 56038

-4709 **EXPLAIN MONITORED STMTS FAILED WITH REASON CODE =** *yyyyy*

Explanation: The EXPLAIN statement specified MONITORED STMTS, but the statement could not be processed for one of the following reasons:

01 Profiling is not active.

02 A matching profile scope is not found.

System action: The statement cannot be processed.

Programmer response: Take the appropriate corrective action for the failing reason code:

01 Execute the START PROFILE command to activate profiling.

02 Specify a scope that matches a profile entry in the profile table.

SQLSTATE: 560CK

-4710 **EXCHANGE DATA STATEMENT SPECIFIED** *table1* **and** *table2* **BUT THE TABLES DO NOT HAVE A DEFINED CLONE RELATIONSHIP**

Explanation: An EXCHANGE DATA statement was issued. The EXCHANGE DATA statement is only supported for pairs of tables that have been defined such that one is a base table and the other is a clone of the base table. Table *table1* is not defined as a clone table of table *table2*, and table *table2* is not defined as a clone table of *table1*.

System action: The statement cannot be processed.

Programmer response: Verify that the table names in the EXCHANGE DATA statement are related where

one is a base table and the other is defined as a clone of the base table.

SQLSTATE: 530A7

-4731 **THE NATIVE SQL ROUTINE STATEMENT FOR PACKAGE** *location-name*.*collection-id*.*program-name*.*consistency-token* **STATEMENT NUMBER** *statement-number* **CANNOT BE PROCESSED.**

Explanation: The SQL routine for the statement must be running at the location where the statement is requested. Either no SQL routine is running at the indicated location, or the SQL routine that is running is not the SQL routine for the indicated package.

location-name
 The name of the server where the statement cannot be processed.

collection-id
 The name of the collection of the package that contains the statement that cannot be processed.

program-name
 The name of the package that contains the statement that cannot be processed.

consistency-token
 The consistency token of the package that contains the statement that cannot be processed.

statement-number
 The package statement number of the statement that cannot be processed.

System action: The statement cannot be processed

System programmer response: Take either of the following corrective actions:

- Use a BIND PACKAGE COPY command instead of the BIND PACKAGE DEPLOY command to bind the package at that location.

- Change the application logic to run the routine at that location where the statement executes.

SQLSTATE: 560C5

Related reference

 ➡ BIND PACKAGE (DSN) (DB2 Commands)

-4734 **THE LOAD MODULE FOR THE PROCEDURE ASSUMES A PARAMETER VARCHAR OPTION THAT IS NOT CONSISTENT WITH THE OPTION SPECIFIED ON THE CREATE PROCEDURE STATEMENT FOR** *procedure-name*

Explanation: The C load module for the SQL

procedure was built assuming a PARAMETER VARCHAR option that is not the same as what was specified on the CREATE PROCEDURE statement for the procedure.

procedure-name
The name of the SQL procedure.

The PARAMETER VARCHAR option assumed when the load module for the procedure is created should be the same as the one that is specified when the procedure is defined to DB2. The consequences of a mismatch include errors at execution time, and invalid data output with no error to indicate that a problem exists.

System action: The statement can not be processed.

Programmer response: Rebuild the procedure so that the options match.

SQLSTATE: 560CU

-4735   **INVALID TABLE REFERENCE FOR TABLE LOCATOR**

Explanation: At execution time, an SQL statement in the body of a routine has a *table-locator-reference* in the FROM clause to reference a transition table of the trigger invoking the routine. For example:

```
TABLE (table-locator-var LIKE table-name)
```

SQLCODE -4735 is issued when the definition of the table that follows the LIKE keyword is different than the definition of the table specified for the table locator parameter on the CREATE PROCEDURE or CREATE FUNCTION statement for the routine.

The use of TABLE LIKE syntax provides an implicit definition of the transition table. It specifies that the transition table has the same number of columns as the identified table or view. The columns must have the same data type, length, precision, scale, subtype, and encoding scheme as the identified table or view, as described in catalog tables SYSCOLUMNS and SYSTABLESPACES. The number of columns and the attributes of those columns are determined at the time the CREATE PROCEDURE or CREATE FUNCTION statement is processed. Any subsequent changes to the number of columns in the table or the attributes of those columns does not affect the parameters of the routine.

System action: The statement cannot be processed.

Programmer response: Change the table name in the table locator reference to the name of a table that has the same definition as the table name used on the CREATE PROCEDURE or CREATE FUNCTION statement for the table locator parameter.

SQLSTATE: 560CV

Related concepts

➦ Queries (DB2 SQL)

Related reference

➥ SYSIBM.SYSCOLUMNS table (DB2 SQL)

➥ SYSIBM.SYSTABLESPACE table (DB2 SQL)

➥ Statements (DB2 SQL)

-5001   **TABLE** *table-name* **IS NOT VALID**

Explanation: The table designator was specified as the operand of the built-in function RID, ROW CHANGE TIMESTAMP expression, or ROW CHANGE TOKEN expression. The table designator that you specified or the table name you entered is not valid for one of the following reasons :

- The name is not defined to be a table designator in this SQL statement.
- The table designator cannot be referenced where it is specified in the SQL statement.
- An unexposed name is used as a table-designator. In this case, the statement does not conform to the guidelines for using only unique exposed names as qualifiers.

System action: The statement cannot be executed.

Programmer response: Correct the syntax and resubmit the statement. Refer to Chapter two of *SQL Reference*, for rules about using table designators.

SQLSTATE: 42703

-5012   **HOST VARIABLE** *host-variable* **IS NOT EXACT NUMERIC WITH SCALE ZERO**

Explanation: HOST VARIABLE *host-variable* was specified, but it is not valid in the context in which it was used. HOST VARIABLE *host-variable* was specified as part of ABSOLUTE or RELATIVE in a FETCH statement, or in a ROWS clause of a MERGE, FETCH or INSERT statement. The host variable was not usable for one of the following reasons:

- It is not an exact numeric type
- The scale is not zero

System action: The statement cannot be processed.

Programmer response: Change the host variable to be an exact numeric with a scale of zero.

SQLSTATE: 42618

-7008   *object-name* **NOT VALID FOR OPERATION (***reason-code***)**

Explanation: The object that is specified is not valid for the requested operation. *reason-code* indicates why the operation is not allowed

10   A CREATE VIEW statement failed because a view cannot be defined on another view for which an INSTEAD OF trigger exists.

17   A CREATE TRIGGER statement failed because an INSTEAD OF trigger cannot be defined on a view that has other views dependent on it, or an AFTER trigger cannot be defined on a table that has a clone defined.

18   A CREATE INDEX or ALTER INDEX statement was issued, but the index can not be created at this time because values have not yet been materialized for the row change timestamp column for some of the rows in the table. Issue REORG on the table space containing the table and then try to create the index.

19   A MERGE statement failed because the target of a MERGE statement cannot be a view that has an instead of trigger defined for it.

System action: The statement cannot be executed.

Programmer response: Specify an object for which the operation would be allowed.

SQLSTATE: 55019

-16000   **AN XQUERY EXPRESSION CANNOT BE PROCESSED BECAUSE THE** *context-component* **COMPONENT OF THE STATIC CONTEXT HAS NOT BEEN ASSIGNED. ERROR QNAME = err:XPST0001**

Explanation: Static analysis of an expression relies on a component of the static context, context-component, that has not been assigned a value.

System action: The XQuery expression cannot be processed.

Programmer response: Assign a value to the *context-component*.

SQLSTATE: 10501

-16001   **AN XQUERY EXPRESSION STARTING WITH TOKEN** *token* **CANNOT BE PROCESSED BECAUSE THE FOCUS COMPONENT OF THE DYNAMIC CONTEXT HAS NOT BEEN ASSIGNED. ERROR QNAME =** *err:XPDY0002*

Explanation: Evaluation of the expression starting with token *token* requires that the focus component of the dynamic context be assigned. The token is being considered as the beginning of a path expression which does not have an associated context item or context sequence. This might be the result of not specifying an XQuery context item expression in the passing clause or the value of the XQuery context item expression is a

null value. Another common cause of this error is that the value in the XPath expression was intended to be a literal string but delimiting quotation characters are missing.

System action: The XQuery expression cannot be processed.

Programmer response: Pass a value that is not null as the XQuery context item expression to XMLQuery or XMLExists.

SQLSTATE: 10501

-16002   **AN XQUERY EXPRESSION HAS AN UNEXPECTED TOKEN** *token* **FOLLOWING** *text***. EXPECTED TOKENS MAY INCLUDE:** *token-list***. ERROR QNAME= ERR:XPST0003**

Explanation: The *token* that follows *text* is not valid where it occurs in the expression. The *token-list* includes one or more possible tokens that are valid replacements for the unexpected token.

System action: The XQuery expression cannot be processed.

Programmer response: Use the correct syntax for the expression.

SQLSTATE: 10505

-16003   **AN EXPRESSION OF DATA TYPE** *value-type* **CANNOT BE USED WHEN THE DATA TYPE** *expected-type* **IS EXPECTED IN THE CONTEXT. ERROR QNAME=** *err:XPTY0004*

Explanation: An XQuery expression includes a value of the type *value-type* in a context where the expected type is *expected-type*. The following situations might cause this error:

- For a constructor function of an XML Schema atomic type, atomization to its argument must not result in more than one atomic value.

- The cast of a value of *value-type* to target *expected-type* must be a supported cast.

System action: The XQuery expression cannot be processed.

Programmer response: Specify a value of the correct type.

SQLSTATE: 10507

-16005   **AN XQUERY EXPRESSION REFERENCES AN ELEMENT NAME, ATTRIBUTE NAME, TYPE NAME, FUNCTION NAME, NAMESPACE PREFIX, OR VARIABLE NAME** *undefined-name* **THAT IS NOT DEFINED WITHIN THE STATIC CONTEXT.**

ERROR QNAME= ERR:XPST0008

Explanation: During the static analysis phase, the static context is used to resolve element names, attribute names, type names, function name, namespace prefixes, and variable names. If an expression uses an *undefined-name* that is not found in the static context, a static error is raised.

System action: The XQuery expression cannot be processed.

Programmer response: Use a name that is defined within the static context. If the QName includes a prefix, verify that the namespace prefix has been bound to a namespace through a namespace declaration. If the error resulted from a variable reference, verify that the variable is in-scope for the expression.

SQLSTATE: 10506

-16007 **-16007 THE XQUERY PATH EXPRESSION REFERENCES AN AXIS** *axis-type* **THAT IS NOT SUPPORTED. ERROR QNAME =** *err:XQST0010*

Explanation: The *axis-type* that is specified is not supported because DB2 XQuery does not support the Full Axis Feature. The supported axes include child, attribute, descendant, self, descendant-or-self, and parent.

System action: The XQuery expression cannot be processed.

Programmer response: Specify an axis that is supported.

SQLSTATE: 10505

-16009 **AN XQUERY FUNCTION NAMED** *function-name* **WITH** *number-of-parms* **PARAMETERS IS NOT DEFINED IN THE STATIC CONTEXT. ERROR QNAME=** *err:XPST0017*

Explanation: In a call to the function *function-name*, the expanded QName and *number-of-parms* do not match the function name and number of parameters of a function signature in the static context.

System action: The XQuery expression cannot be processed.

Programmer response: Try one of the following actions:

- Verify that you are passing the correct number of parameters to the function call.
- If the function call uses a function name with no prefix, verify that the local name of the function matches a function that is in the default function namespace, or use the correct prefix.

SQLSTATE: 10506

-16011 **THE RESULT OF AN INTERMEDIATE STEP EXPRESSION IN AN XQUERY PATH EXPRESSION CONTAINS AN ATOMIC VALUE. ERROR QNAME =** *err:XPTY0019*

Explanation: Each intermediate step in an XQuery expression must evaluate to a sequence of XQuery nodes. Such sequences might be empty. They must not include any XQuery atomic values.

System action: The XQuery expression cannot be processed.

Programmer response: Modify the expression to ensure that each intermediate step in an XQuery expression returns a sequence of nodes.

SQLSTATE: 10507

-16012 **THE CONTEXT ITEM IN AN AXIS STEP MUST BE A NODE. ERROR QNAME =** *err:XPTY0020*

Explanation: In an axis step, the context item, which is the item currently being processed, must be a node of the XQuery Data Model.

System action: The XQuery expression cannot be processed.

Programmer response: Modify the axis step or the input to ensure that the context item is a node.

SQLSTATE: 10507

-16015 **AN ELEMENT CONSTRUCTOR CONTAINS AN ATTRIBUTE NODE NAMED** *attribute-name* **THAT FOLLOWS AN XQUERY NODE THAT IS NOT AN ATTRIBUTE NODE. ERROR QNAME =** *ERR:XQTY0024*

Explanation: The content sequence of an element constructor contains an attribute node named *attribute-name* that follows an XQuery node that is not an attribute node.

System action: The XQuery expression cannot be processed.

Programmer response: Modify the content sequence to ensure that attribute nodes follow other attribute nodes.

SQLSTATE: 10507

-16016 **THE ATTRIBUTE NAME** *attribute-name* **CANNOT BE USED MORE THAN ONCE IN AN ELEMENT CONSTRUCTOR. ERROR QNAME =** *err:XQTY0025*

Explanation: An XQuery expression uses an attribute-name more than once in an element

constructor. This is not allowed because the attribute names that are used in an element constructor must be unique.

System action: The XQuery expression cannot be processed.

Programmer response: Specify a unique name for each attribute.

SQLSTATE: 10503

-16020 **THE CONTEXT NODE IN A PATH EXPRESSION THAT BEGINS WITH AN INITIAL "/" OR "//" DOES NOT HAVE AN XQUERY DOCUMENT NODE ROOT. ERROR QNAME =** *err:XPDY0050*

Explanation: The root node above the context node in an absolute path expression (The symbols / or // at the beginning of the path expression) must be an XQuery document node.

System action: The XQuery expression cannot be processed.

Programmer response: Change each path expression that begins with an initial "/" or "/ /" so that the context node has a root node that is an XQuery document node.

SQLSTATE: 10507

-16022 **OPERANDS OF TYPES** *xquery-data-types* **ARE NOT VALID FOR OPERATOR** *operator-name* **. ERROR QNAME =** *err:XPTY0004*

Explanation: One or both operands of the operator have invalid data types. The following situations might cause this error:

- The types of the operands are not a valid combination for the given operator. For example, the operands of an arithmetic operator are not of numeric types. Or a comparison operator compares xs:string with xs:integer.
- One or both operands of an arithmetic operator are a sequence of more than one items, but the given operator requires single item operands. The notation (item(), item()+) represents the type of a sequence of more than one item.
- The content sequence of a document node constructor (e.g XMLDOCUMENT) cannot contain attribute nodes.

System action: The XQuery expression cannot be processed.

Programmer response: Use operands that have the correct types for the operator.

SQLSTATE: 10507

-16023 **THE XQUERY PROLOG CANNOT CONTAIN MULTIPLE DECLARATIONS FOR THE SAME NAMESPACE PREFIX** *ns-prefix***. ERROR QNAME =** *err:XQST0033*

Explanation: The prolog contains multiple declarations for the namespace prefix *nsprefix*. Although a namespace declaration in a prolog can override a prefix that has been predeclared in the static context, the same namespace prefix cannot be declared more than once in the prolog.

System action: The XQuery expression cannot be processed.

Programmer response: Remove any extra declarations for the prefix from the prolog, or change the prefix that is assigned to the extra declarations. Verify that the prefixes used in the query reference the correct namespaces.

SQLSTATE: 10503

-16024 **THE NAMESPACE PREFIX** *prefix-name* **CANNOT BE REDECLARED OR CANNOT BE BOUND TO THE SPECIFIED URI. ERROR QNAME =** *err:XQST0070*

Explanation: A namespace declaration cannot redeclare the predefined namespace prefixes XML or XMLNS. If the prefix name is not XML, then it cannot be bound to the namespace URI 'http://www.w3.org/XML/1998/namespace'. No prefix can be bound to the namespace URI 'http://www.w3.org/2000/xmlns/' either.

System action: The XQuery expression cannot be processed.

Programmer response: Perform one of the following actions:

- If the prefix name is XML or XMLNS, then change the prefix name to a different namespace prefix or remove the namespace declaration.
- If the namespace URI is 'http://www.w3.org/XML/1998/namespace' or 'http:// www.w3.org/2000/xmlns/', then change the namespace URI specified in the declaration of the namespace prefix.

SQLSTATE: 10503

-16031 **XQUERY LANGUAGE FEATURE USING SYNTAX** *string* **IS NOT SUPPORTED**

Explanation: The XQuery expression includes the syntax indicated in string that is defined by the standard XQuery language specifications but is not supported in DB2.

System action: The XQuery expression cannot be processed.

Programmer response: Remove the unsupported expression starting with the syntax string from the XQuery expression.

SQLSTATE: 10509

-16032 THE STRING *string* IS NOT A VALID URI. ERROR QNAME = *err:XQST0046*

Explanation: A namespace declaration or namespace declaration attribute specifies a string value that is not a valid URI.

System action: The XQuery expression cannot be processed.

Programmer response: Specify a string value that is a valid URI. A valid URI must conform to the generic URI syntax specified by the World Wide Web Consortium (W3C).

SQLSTATE: 10504

-16036 THE URI THAT IS SPECIFIED IN A NAMESPACE DECLARATION CANNOT BE A ZERO-LENGTH STRING

Explanation: The URI that is specified in a namespace declaration must be a valid URI that conforms to the generic URI syntax specified by the World Wide Web Consortium (W3C). The URI cannot be a zero-length string.

System action: The XQuery expression cannot be processed.

Programmer response: Specify a valid URI in the namespace declaration.

SQLSTATE: 10504

-16046 A NUMERIC XQUERY EXPRESSION ATTEMPTED TO DIVIDE BY ZERO. ERROR QNAME = *err:FOAR0001*

Explanation: A division or modulus operation attempted to divide an integer or decimal value by zero.

System action: The XQuery expression cannot be processed.

Programmer response: Use a value for the divisor that is not equal to zero.

SQLSTATE: 10601

-16047 AN XQUERY EXPRESSION RESULTED IN ARITHMETIC OVERFLOW OR UNDERFLOW. ERROR QNAME= *err:FOAR0002*

Explanation: An arithmetic operation resulted in a number that either exceeded the maximum or was

below the minimum value allowed.

System action: The XQuery expression cannot be processed.

Programmer response: Modify the expression to result in a number that does not result in an arithmetic overflow or underflow.

SQLSTATE: 10601

-16048 AN XQUERY PROLOG CANNOT CONTAIN MORE THAN ONE *decl-type* DECLARATION. ERROR QNAME = *error-qname*

Explanation: Declaring more than one default element namespace in a prolog results in an error. The token *decl-type* can only be default element namespace and the *error-name* can only be XQST0066 for DB2.

System action: The XQuery expression cannot be processed.

Programmer response: Remove the extra default namespace declaration from the prolog.

SQLSTATE:: 10502

-16049 THE LEXICAL VALUE *value* IS NOT VALID FOR THE *type-name* DATA TYPE IN THE FUNCTION OR CAST. ERROR QNAME= *err:FOCA0002*

Explanation: A cast expression or function call includes a value that does not have the correct lexical form for the *type-name* data type.

System action: The XQuery expression cannot be processed.

Programmer response: Try one of the following actions:

- If the error results from a function invocation, verify that the string parameters used for QNames or local names have the correct lexical form.
- If the error results from a cast expression, verify that the source value is not one of the special float or double values NaN, INF, or -INF.

SQLSTATE: 10602

-16051 THE VALUE *value* OF DATA TYPE *source-type* IS OUT OF RANGE FOR AN IMPLICIT OR EXPLICIT CAST TO TARGET DATA TYPE *target-type*. ERROR QNAME = err:*error-qname*

Explanation: An XQuery expression requires that the *value* with a data type of *source-type* be cast, either implicitly or explicitly to the target data type *target-type*. The value is outside the defined range of values for that data type.

This error could be returned for a variety of error

QNames such as FOAR0002, FOCA0001, or FOCA0003.

System action: The XQuery expression cannot be processed.

Programmer response: Change the XQuery expression to use a target data type with a range that supports the specific value, or change the value to be within the defined range of the target data type.

SQLSTATE: 10602

| **-16061** | **THE VALUE** *value* **CANNOT BE CONSTRUCTED AS, OR CAST (USING AN IMPLICIT OR EXPLICIT CAST) TO THE DATA TYPE** *data-type*. **ERROR QNAME =** *err:FORG0001* |

Explanation: An XQuery expression attempted to use the value *value* as a *data-type* value but the value is not valid for the data type. The following situations might cause this error:

• A *value* was explicitly passed to a cast function or specified in a cast expression with a target data type of *data-type*.

• An expression that included *value* implicitly cast the value to the target data type of *data-type*. Many XQuery expressions use implicit casting to process the expressions. For example, implicit casting is used in general comparisons of numeric values that require the values to be of data type xs:double.

System action: The XQuery expression cannot be processed.

Programmer response: Try one of the following actions:

• If the error occurs in an expression that casts from one primitive type to another, verify that casting from the source type to the target type is supported. If the cast is not supported, either remove the expression or cast the value to a different data type.

• Check for expressions that would result in implicit casting with values that may not conform to the data type of the implicit cast and add conditions to the expression to avoid the error.

SQLSTATE: 10608

| **-16065** | **AN EMPTY SEQUENCE CANNOT BE CAST TO THE DATA TYPE** *data-type*, **ERROR QNAME =** *err:FORG0006* |

Explanation: A namespace declaration or namespace declaration attribute specifies a string value that is not a valid URI.

System action: The XQuery expression cannot be processed.

Programmer response: Specify a string value that is a valid URI. A valid URI must conform to the generic

URI syntax specified by the World Wide Web Consortium (W3C).

SQLSTATE: 10608

| **-16066** | **THE ARGUMENT PASSED TO THE AGGREGATE FUNCTION** *function-name* **IS NOT VALID. ERROR QNAME =** *err:FORG0006* |

Explanation: The argument that was passed to the aggregate function *function-name* is not valid because the argument does not meet any of the conditions that are required for arguments to the function *function-name*.

System action: The XQuery expression cannot be processed.

Programmer response: If the function is fn:sum, verify that the following conditions are met:

• All items in the input sequence must be numeric or derived from a single base type.

• The type must support addition.

• The values must all be promotable to a single common type if the input sequence contains numeric values.

SQLSTATE: 10608

| **-16067** | **THE FLAGS ARGUMENT VALUE PASSED TO THE FUNCTION** *function-name* **IS NOT VALID. ERROR QNAME=** *err:FORX0001* |

Explanation: The function *function-name* includes a value that was passed to the function as a regular expression flag parameter. However, the string that was passed to the function includes characters that are not defined as flags.

Programmer response: Modify the function call to pass in a string argument that contains only characters that are defined as flags. Valid characters include s, m, i or x.

SQLSTATE: 10609

| **-16068** | **THE REGULAR EXPRESSION ARGUMENT VALUE PASSED TO THE FUNCTION** *function-name* **IS NOT VALID. ERROR QNAME=** *err:FORX0002* |

Explanation: The value that was passed to the function *function-name* is not valid according to the rules that are specified for regular expressions in XQuery. These rules are based on the regular expression syntax specified in XML Schema, with some extensions added to the syntax to accommodate XQuery. See *XML Guide* for a description of XQuery-specific extensions to the regular expression syntax for XML Schema.

| **Programmer response:** Specify a valid value for the regular expression.

| **SQLSTATE:** 10609

| **-16069** **A REGULAR EXPRESSION ARGUMENT** *value* **PASSED TO THE FUNCTION** *function-name* **MATCHES A ZERO-LENGTH STRING. ERROR QNAME=** *err:*FORX0003

| **Explanation:** The value that was specified for the pattern parameter in a call to the function *function-name* matches a zero-length string. A zero-length string is not a valid pattern for this function because the pattern will never match a substring in the input string.

| **Programmer response:** Pass a valid pattern to the function call, or remove the function call from the expression.

| **SQLSTATE:** 10609

| **-16075** **THE SEQUENCE TO BE SERIALIZED CONTAINS AN ITEM THAT IS AN ATTRIBUTE NODE. ERROR QNAME =** *err:*SENR0001

Explanation: A request was made to serialize an XML value. The XML value is a sequence containing an item that is an XQuery attribute node. There is no defined sequence normalization for an attribute node as an item in a sequence and therefore the sequence cannot be serialized.

System action: The statement cannot be processed.

User response: Remove any items in the sequence containing just an attribute node or do not attempt to serialize the sequence.

SQLSTATE: 2200W

| **-16246** **INCOMPLETE ANNOTATION MAPPING AT OR NEAR LINE** *lineno* **IN XML SCHEMA DOCUMENT** *uri*. **REASON CODE =** *reason-code*.

| **Explanation:** The annotation mapping the XML schema item near *line* in *uri*, to a database object is missing some information. Possible values for reason code include:

| 1. A rowset name is not specified or is not fully qualified.

| 2. Any mapping must specify either a target column or a condition. Neither a target column nor a condition is specified.

| 3. The annotation has an unexpected format.

| The XML schema document can be determined by matching *uri* to the SCHEMALOCATION column of table SYSIBM.XSROBJECTCOMPONENTS.

| The XML schema is not enabled for decomposition.

| **User response:** Modify the annotations in the XML schema. Possible actions based on the *reason-code* include:

| 1. Specify a rowset name or fully qualify the rowset name.

| 2. Specify either a target column or a condition.

| 3. Correct the format of the annotation.

| Consult annotated XML schema documentation on the specified annotation to make sure that all required components have supplied values.

| **SQLSTATE:** 225DE

| **-16247** **SOURCE XML TYPE** *source-data-type* **CANNOT BE MAPPED TO TARGET SQL TYPE** *target-data-type* **IN THE ANNOTATION AT OR NEAR LINE** *lineno* **IN XML SCHEMA DOCUMENT** *uri*

| **Explanation:** Annotation at or around line *lineno* in XML schema document *uri* maps a XML schema type *source-data-type* to an incompatible SQL type *target-data-type*. The XML schema document can be determined by matching *uri* to the SCHEMALOCATION column of table SYSIBM.XSROBJECTCOMPONENTS.

| The XML schema is not enabled for decomposition.

| **User response:** Consult annotated XML schema documentation on compatibility between XML schema types and SQL types. Correct the annotation appropriately.

| **SQLSTATE:** 225DE

| **-16248** **UNKNOWN ANNOTATION** *annotation-name* **AT OR NEAR LINE** *lineno* **IN XML SCHEMA DOCUMENT** *uri*

| **Explanation:** The annotated XML schema document *uri* contains an error in the annotation at or near the line containing *lineno*. The unrecognized name given in the annotation tag is *annotation-name*.

| The XML schema document can be determined by matching *uri* to the SCHEMALOCATION column of table SYSIBM.XSROBJECTCOMPONENTS.

| **System action:** The XML schema is not enabled for decomposition. The XSR_COMPLETE invocation fails with this SQLCODE.

| **User response:** Consult annotated XML schema documentation for list of legal annotations and their syntax. Correct or remove the unknown annotation.

| **SQLSTATE:** 225DE

Chapter 2. SQL error codes **155**

| -16249 | THE *db2-xdb:expression* ANNOTATION *expression* AT OR NEAR LINE *lineno* IN XML SCHEMA DOCUMENT *uri* IS TOO LONG. |

Explanation: String length of the specified expression exceeded the maximum allowed. The XML schema document can be determined by matching *uri* to the SCHEMALOCATION column of table SYSIBM.XSROBJECTCOMPONENTS.

The XML schema is not enabled for decomposition. The XSR_COMPLETE invocation fails with this SQLCODE.

User response: Consult annotated XML schema documentation on the limit for strings specified in *db2-xdb:expression* expression annotations. Correct the expression appropriately.

SQLSTATE: 225DE

| -16250 | THE *db2-xdb:defaultSQLSchema* WITH VALUE *schema-name* AT OR NEAR LINE *lineno* IN XML SCHEMA DOCUMENT *uri* CONFLICTS WITH ANOTHER *db2-xdb:defaultSQLSchema* SPECIFIED IN ONE OF THE XML SCHEMA DOCUMENTS WITHIN THE SAME XML SCHEMA. |

Explanation: There can only be one value for the *db2-xdb:defaultSQLSchema* annotation across all XML schema documents that comprise an annotated XML schema. The specified SQL schema name *schema-name* at or near the line number *lineno* in the XML schema document *uri* conflicts with another value for *db2-xdb:defaultSQLSchema* annotation in this or another XML schema document of the XML schema. The XML schema document can be determined by matching *uri* to the SCHEMALOCATION column of table SYSIBM.XSROBJECTCOMPONENTS.

The XML schema is not enabled for decomposition.

User response: Correct the annotated XML schema such that all specifications of *db2-xdb:defaultSQLSchema* are consistent.

SQLSTATE: 225DE

| -16251 | DUPLICATE ANNOTATION DEFINED FOR *object-name* AT OR NEAR *location* IN XML SCHEMA DOCUMENT *uri* |

Explanation: There is more than one annotation for *object-name* in the annotated XML schema. A duplicate annotation has been found for this object at or around *location* in XML schema document *uri*. The XML schema document can be determined by matching *uri* to the SCHEMALOCATION column of table SYSIBM.XSROBJECTCOMPONENTS.

System action: The XML schema is not enabled for

decomposition. The XSR_COMPLETE invocation fails with this SQLCODE.

Programmer response: Correct the annotated XML schema by removing the duplicate annotation from the XML schema documents of the XML schema.

SQLSTATE: 225DE

| -16252 | THE *db2-xdb:rowSet* NAME *rowset-name* SPECIFIED AT OR NEAR LINE *lineno* IN THE XML SCHEMA DOCUMENT *uri* IS ALREADY ASSOCIATED WITH ANOTHER TABLE |

Explanation: A rowset in an annotated XML schema must correspond to exactly one table. The rowset declaration at or near line *lineno* declares an association between rowset *rowsetname* and the table specified in the enclosing db2-xdb:table annotation. The specified rowset has already been associated to a different table in another db2-xdb:table annotation. The XML schema document can be determined by matching *uri* to the SCHEMALOCATION column of table SYSIBM.XSROBJECTCOMPONENTS.

The XML schema is not enabled for decomposition.

User response: Correct the annotated XML schema such that each rowset name is uniquely associated with exactly one table across the annotated XML schema documents of the XML schema.

SQLSTATE: 225DE

| -16253 | THE *db2-xdb:condition* ANNOTATION *condition* AT OR NEAR LINE *lineno* IN XML SCHEMA DOCUMENT *uri* IS TOO LONG. |

Explanation: The length of the string associated with db2-xdb:condition that starts with *condition* exceeds the maximum allowed. The db2-xdb:condition is found at or around line number *lineno* in XML schema document *uri*. The XML schema document can be determined by matching *uri* to the SCHEMALOCATION column of table SYSIBM.XSROBJECTCOMPONENTS.

The XML schema is not enabled for decomposition.

User response: Reduce the size of the condition string for db2-xdb:condition in the XML schema document. Consult annotated XML schema documentation on the limit for strings specified in db2-xdb:condition annotations.

SQLSTATE: 225DE

| -16254 | A *db2-xdb:locationPath locationpath* AT OR NEAR LINE *lineno* IN XML SCHEMA DOCUMENT *uri* IS NOT VALID WITH REASON CODE *reason-code*. |

Explanation: A value specified in the annotated

| schema for *db2-xdb:locationPath* is not valid. The XML schema document can be determined by matching *uri* to the SCHEMALOCATION column of table SYSIBM.XSROBJECTCOMPONENTS. Possible values for reason code include:

1. Some element or attribute has a namespace prefix that is not mapped to a URI. All namespace prefixes used in the location path must have been associated with a namespace in the XML schema document containing the annotation specifying this location path.

2. Invalid syntax for a location path.

3. The specified path does not match any possible path from a root node to a location where the element or attribute may appear in an instance document.

System action: The XML schema is not enabled for decomposition. The XSR_COMPLETE invocation fails with this SQLCODE

User response: Modify the annotations in the XML schema. Possible actions based on the *reason-code* include:

1. Ensure that namespace prefixes in the db2-xdb:locationPath are correct or add a declaration for the missing namespace.

2. Ensure that the syntax of the value for db2-xdb:locationPath is valid syntax for a location path.

3. Ensure that the value for db2-xdb:locationPath corresponds to a possible path from the root node to the element or attribute at the end of the location path.

SQLSTATE: 225DE

| **-16255** | **A** *db2-xdb:rowSet* **VALUE** *rowset-name* **USED AT OR NEAR LINE** *lineno* **IN XML SCHEMA DOCUMENT** *uri* **CONFLICTS WITH A** *db2-xdb:table* **ANNOTATION WITH THE SAME NAME.**

Explanation: The annotated XML schema contains a db2-xdb:table annotation which declares a table named *rowsetname*, but the annotated XML schema does not have any db2-xdb:rowSet annotation declaration to associate *rowsetname* to any table. If a rowset is not declared in any db2-xdb:table annotation, it is implicitly associated to a table with the same name qualified by the value of db2-xdb:defaultSQLSchema. The annotated XML schema cannot use a db2-xdb:rowSet annotation that relies on an implicit association between a rowset and a table with the same name of *rowset-name*, and at the same time declare a table named *rowset-name* using a db2-xdb:table annotation. The XML schema document can be determined by matching *uri* to the SCHEMALOCATION column of table SYSIBM.XSROBJECTCOMPONENTS.

The XML schema is not enabled for decomposition.

User response: Correct the annotated XML schema by adding a db2-xdb:rowSet child element to the db2-xdb:table element with name *rowset-name*. This will explicitly associate the rowset to the table.

SQLSTATE: 225DE

| **-16257** | **XML SCHEMA FEATURE** *feature* **SPECIFIED IS NOT SUPPORTED FOR DECOMPOSITION.**

Explanation: Decomposition on an XML schema with *feature* is not supported. This feature is used in the XML schema. In some cases, the presence of the unsupported feature in the XML schema results in failure to enable for decomposition. In other cases, having annotations in the decomposition namespace on the unsupported feature results in failure to enable for decomposition.

System action: The XML schema is not enabled for decomposition. The XSR_COMPLETE invocation fails with this SQLCODE.

User response: Remove the feature from the XML schema or remove the decomposition annotations associated with the feature, as appropriate. Consult decomposition documentation on the restrictions on use of the specified XML schema feature.

SQLSTATE: 225DE

| **-16258** | **THE XML SCHEMA CONTAINS A RECURSIVE ELEMENT WHICH IS AN UNSUPPORTED FEATURE FOR DECOMPOSITION. THE RECURSIVE ELEMENT IS IDENTIFIED AS** *elementnamespace* : *elementname* **OF TYPE** *typenamespace* : *typename*.

Explanation: XML schemas with recursive elements are not supported for decomposition. At least one recursive element was found identified as *elementnamespace:elementname* of type *typenamespace:typename*.

The XML schema is not enabled for decomposition.

User response: Remove the use of recursion from the XML schema.

SQLSTATE: 225DE

| **-16259** | **INVALID MANY-TO-MANY MAPPINGS DETECTED IN XML SCHEMA DOCUMENT** *uri1* **NEAR LINE** *lineno1* **AND IN XML SCHEMA DOCUMENT** *uri2* **NEAR LINE** *lineno2*.

Explanation: The two identified annotations specify an invalid many-to-many relationship between elements that map to the same rowset. If two element

declarations have a sequence model group as their lowest common ancestor then only one of the paths from the element declaration up to that model group can have maxOccurs>1 on one or more elements declarations or modelgroups in that path. The XML schema documents can be determined by matching *uri1* and *uri2* to the SCHEMALOCATION column of catalog view SYSCAT.XSROBJECTCOMPONENTS.

The XML schema is not enabled for decomposition.

User response: Correct the annotations such that there are no many-to-many mappings. Consult annotated XML schema documentation for rules on mapping elements and attributes.

sqlcode: -16259

sqlstate: 225DE

-16260 **XML SCHEMA ANNOTATIONS INCLUDE NO MAPPINGS TO ANY COLUMN OF ANY TABLE.**

Explanation: The XML schema contains no annotations that map an XML element or attribute to any column of any table.

The XML schema is not enabled for decomposition since it provides no information for performing decomposition.

User response: Add annotations to the XML schema so that at least one XML element or attribute is mapped to a column of a table.

SQLSTATE: 225DE

-16262 **THE ANNOTATED XML SCHEMA HAS NO COLUMNS MAPPED FOR ROWSET** *rowsetname*.

Explanation: The set of annotations involving rowset *rowsetname* contain no mappings to any column. In order for a rowset to be target for decomposition, at least one column must be mapped to some XML element or attribute.

User response: Add an annotation that maps a column of the specified rowset to some XML element or attribute. If the rowset is not intended to be a target for decomposition, remove references to the rowset from the annotated XML schema.

SQLSTATE: 225DE

-16265 **THE XML DOCUMENT CANNOT BE DECOMPOSED USING XML SCHEMA** *xsrobject-name* **WHICH IS NOT ENABLED OR IS INOPERATIVE FOR DECOMPOSITION.**

Explanation: The XML schema identified by *xsrobject-name* is not in the correct state to perform

decomposition. The XML schema could be in one of the following states:

- Not enabled for decomposition (possibly never enabled)
- Disabled for decomposition
- Inoperative for decomposition because of changes to the definitions of one or more tables specified in the annotations.

Decomposition can only be performed using XML schemas that are enabled for decomposition.

XML decomposition was not started.

User response: Ensure that the XML schema is enabled for decomposition before attempting to use it for decomposition of an XML document. The decomposition status of an XML schema can be checked by selecting the DECOMPOSITION column of SYSCAT.XSROBJECTS for the XML schema identified by *xsrobject-name*.

SQLSTATE: 225DE

-16266 **AN SQL ERROR OCCURRED DURING DECOMPOSITION OF DOCUMENT** *docid* **WHILE ATTEMPTING TO INSERT DATA. INFORMATION RETURNED FOR THE ERROR INCLUDES SQLCODE** *sqlcode*, **SQLSTATE** *sqlstate*, **AND MESSAGE TOKENS** *token-list*.

Explanation: An SQL error occurred during decomposition of an XML document with document identifier *docid*. The error occurred while attempting an SQL insert operation based on some piece of data from the XML document. Some possible causes: format of data is incompatible with the target column's data type; length of data exceeds column size; providing null value for a column defined as non-null. The sqlcode, sqlstate and message token list (each token is separated by the vertical bar character) are provided. The message tokens may be truncated. See the corresponding message for the *sqlcode* for further explanation of the error.

The XML document *docid* was not decomposed.

User response: Check the message associated with the SQLCODE. Follow the action suggested by that message. See db2diag.log for complete information about the error condition.

SQLSTATE: 225DE

-20003 **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.

SQLSTATE: 560A7

| **-20004** | **8K or 16K BUFFERPOOL PAGESIZE INVALID FOR A WORKFILE OBJECT**

Explanation: This message is issued when a statement specifies an 8K or 16K pagesize in the BUFFERPOOL clause for a workfile object. The error can occur for the following SQL statements:

- A CREATE or ALTER DATABASE statement.
- A CREATE or ALTER TABLESPACE statement.

System action: The statement cannot be executed.

User response: Correct the statement to specify a 4K or 32K bufferpool pagesize.

SQLSTATE: 560A8

-20005 | **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, CREATE FUNCTION, CREATE PROCEDURE, CREATE SEQUENCE, or CREATE or ALTER TABLE statement that defintes an identity column.

System action: The SQL statement cannot be executed.

Programmer response: Drop objects of *object-type* that are not being used, and retry the statement.

SQLSTATE: 54035

-20008 | **UNSUPPORTED OPTION** *keyword* **SPECIFIED**

Explanation: The statement attempted to use a feature or format that is not supported.

reason-code
    A numeric value that identifies the unsupported feature:

    3   TYPE 1 is a deprecated feature for indexes and is no longer supported. Only TYPE 2 can be specified.*object-name* is *N.

System action: The statement cannot be processed.

Programmer response: Change your SQL statement to avoid using the unsupported feature or format. Take the action that corresponds to the *reason-code* value:

3   Update the SQL statement to remove references to the unsupported clause.

SQLSTATE: 560A9

Related reference

➥ Statements (DB2 SQL)

-20019 | **THE RESULT TYPE RETURNED FROM THE FUNCTION BODY CANNOT BE ASSIGNED TO THE DATA TYPE DEFINED IN THE RETURNS CLAUSE**

Explanation: The data type of the value returned by the function body must be assignable to the parameter specified in the RETURNS clause.

System action: The statement cannot be executed.

Programmer response: Change the RETURNS type or change the expression in the RETURN statement so that the result type of the expression returned from the function body can be made.

SQLSTATE: 42866

-20058 | **THE FULLSELECT SPECIFIED FOR MATERIALIZED QUERY TABLE** *table-name* **IS NOT VALID.**

Explanation: The materialized query table definition has specific rules regarding the contents of the fullselect. When DISABLE QUERY OPTIMIZATION is specified, the following additional restrictions apply:

- The fullselect cannot contain a reference to a created global temporary table or a declared global temporary table.
- The fullselect cannot reference another materialized query table.
- The fullselect cannot contain a result type of XML.

When a materialized query table is defined with ENABLE QUERY OPTIMIZATION specified, more restrictions apply:

- The fullselect must be a subselect.
- The subselect cannot reference to a user-defined scalar or table function with the EXTERNAL ACTION or NON-DETERMINISTIC attributes, or built-in function RAND.
- The subselect cannot contain any predicates which include subqueries.
- The subselect cannot contain a nested table expression or view that requires temporary materialization.
- The subselect cannot contain a join using the INNER JOIN syntax.
- The subselect cannot contain an outer join.

- The subselect cannot contain a special register.
- The subselect cannot contain a scalar fullselect.
- The subselect cannot contain a row expression predicate.
- The subselect cannot contain sideway references.
- The subselect cannot contain table objects with multiple CCSID sets.
- The subselect cannot contain more than one table with a security label column, and the security label column must be one of the select list items of the subselect.
- The subselect cannot contain a row change timestamp column.
- The subselect cannot contain built-in function RID.
- The subselect cannot contain ROW CHANGE TOKEN or ROW CHANGE TIMESTAMP expressions.
- If the subselect references a view, the fullselect in the view definition must satisfy the above restrictions.

System action: The statement cannot be processed.

Programmer response: Change the fullselect in the CREATE TABLE or ALTER TABLE statement so that it conforms to the rules listed above.

SQLSTATE: 428EC

-20060   **UNSUPPORTED DATA TYPE** *data-type* **ENCOUNTERED IN SQL** *object-type object-name*

Explanation: The data type that was specified in the definition of an object is not supported for that type of object.

data-type
    The data type that was specified.

object-type
    The type of object: an SQL parameter or variable.

object-name
    The name of the object.

System action: The statement cannot be processed.

User response: Review the appropriate CREATE statement to determine which data types are supported for the specified object, correct the syntax, and reissue the statement.

SQLSTATE: 560AB

Related reference

➡ Statements (DB2 SQL)

-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.

SQLSTATE: 53098

-20071   **WLM ENVIRONMENT NAME MUST BE SPECIFIED** *function-name*

Explanation: The WLM ENVIRONMENT option was not specified on CREATE FUNCTION or CREATE PROCEDURE, 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 or CREATE PROCEDURE statement. Contact your system administrator to find out the names of the WLM environments that have been defined for your installation.

SQLSTATE: 53099

-20072   *bind-type bind-subtype* **ERROR USING** *authorization-id* **AUTHORITY OPERATION IS NOT ALLOWED ON A** *package-type* **PACKAGE** *package-name*

Explanation: The bind subcommand *bind-type* with *bind-subtype* is not valid for the type of package specified for one of the following reasons:

- The subcommand REBIND TRIGGER PACKAGE can be used only for trigger packages.
- The subcommand BIND PACKAGE DEPLOY can be used only for native SQL procedure packages.
- The subcommand FREE PACKAGE can be used only for non-trigger and non-native SQL procedure packages.

csect-name
    The name of the control section that issued the message.

bind-type
    The type of bind subcommand: REBIND or FREE.

bind-subtype
>   The subtype of bind subcommand: TRIGGER or DEPLOY.

authorization-id
>   The authorization ID that is attempting the prohibited action.
>
>   If you are using a trusted context, the token *authorization-id* might return a role instead of an authorization ID. A role is returned if a role was in effect and the authorization checking is performed against the role rather than the authorization ID of the session when the condition was encountered.

package-name
>   The name of the package, in the format `'collection.package'`.

role-name
>   The name of the role, in the format: `'Role: role-name'`

package-type
>   The type of package: trigger, SQL function, or native SQL procedure.

System action: The package that is specified is not deployed, rebound, or freed.

System programmer response: For a package that is not a trigger package, rebind using the subcommand REBIND PACKAGE. Call the bind subcommand again, and specify a collection package that is an accepted package.

SQLSTATE: 56052

-20073   THE FUNCTION *function-name* **CANNOT BE ALTERED BECAUSE IT IS REFERENCED IN EXISTING VIEW OR MATERIALIZED QUERY TABLE DEFINITIONS**

Explanation: The *function-name* in an ALTER FUNCTION statement cannot be altered to NOT DETERMINISTIC or EXTERNAL ACTION. It is referenced in one or more existing view definitions or materialized query table definitions.

System action: The statement cannot be executed.

Programmer response: Drop the views that reference the function before issuing the ALTER FUNCTION statement. Drop the materialized query tables that reference the functions or alter the materialized query tables that reference the functions into base tables before issuing the ALTER FUNCTION statement.

SQLSTATE: 42927

-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 to this rule include the following conditions:

- SYSADM and SYSTOOLS are valid schema names.
- SYSFUN is a valid schema name for external user-defined scalar functions or external user-defined table functions when the current application process has the SYSADM or SYSCTRL privilege.
- SYSPROC is a valid schema name for stored procedures.
- SYSIBM is a valid schema name for a stored procedure when the current application process has the SYSADM or SYSCTRL privilege.
- SYSTOOLS is a valid schema name when the current application process has the SYSADM or SYSCTRL privilege.

You might also receive this message if you made 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.

This condition is similar to the condition reported in precompiler message DSNH794I.

This message will also be issued if you explicitly create a database name with eight characters that starts with "DSN", and is followed by exactly five digits.

System action: The statement is not executed.

Programmer response: Select a name that does not start with a reserved prefix.

SQLSTATE: 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.

In the case of DECLARE GLOBAL TEMPORARY TABLE, it is possible to get the identity column attributes for a column of a view using the AS *subselect* clause with INCLUDING IDENTITY

COLUMN ATTRIBUTES instead. For example:

```
DECLARE GLOBAL TEMPORARY TABLE ....
  AS (SELECT * FROM view-name) DEFINITION ONLY
  INCLUDING IDENTITY COLUMN ATTRIBUTES
```

SQLSTATE: 560AD

| **-20092** | **A TABLE OR VIEW WAS SPECIFIED IN THE LIKE CLAUSE, BUT THE OBJECT CANNOT BE USED IN THIS CONTEXT** |

Explanation: The LIKE clause specified the name of a table or view that is not valid for one of the following reasons:

- If the object is a view, it is not allowed in the LIKE clause because the view includes a ROWID or XML column. This is not supported.
- If the object is a table, it is not allowed in the LIKE clause because it is defined as a clone of another table.

System action: The statement is not executed.

Programmer response: Specify the name of a view that does not contain a ROWID column (or distinct type column for which the source type is ROWID), or specify the name of a table and resubmit the statement.

Specify the name of a table that is not a clone table, if you specified a table in the LIKE clause that is defined as the clone of another table.

SQLSTATE: 560AE

| **-20093** | **THE TABLE** *table-name* **CANNOT BE CONVERTED TO OR FROM A MATERIALIZED QUERY TABLE, OR THE MATERIALIZED QUERY TABLE PROPERTY CANNOT BE ALTERED. REASON CODE =** *reason-code*. |

Explanation: The ALTER TABLE statement was not able to change a table from a materialized query table to a base table, to convert a base table to a materialized query table, or to change the materialized query table properties. The ALTER TABLE statement failed because of one of the following error situations, as indicated by *reason-code*:

reason-code
  Description

2 The table is not a materialized query table, and DROP MATERIALIZED QUERY is specified.

4 The table has at least one trigger defined.

5 The table has at least one check constraint defined.

6 The table has at least one unique constraint or index defined.

7 The table has at least one referential constraint defined.

8 The table is referenced in the definition of an existing materialized query table, or it is referenced in the definition of a view when altering to a system-maintained materialized query table.

9 The table is referenced directly or indirectly (through a view, for example) in the fullselect.

10 The table is already a materialized query table.

11 The number of columns of the existing table does not match the number of columns that are defined in the select list of the fullselect.

12 The data types of the columns of the existing table do not exactly match the corresponding columns in the select list of the fullselect.

13 The column names of the columns of the existing table do not exactly match the corresponding column names in the select list of the fullselect.

14 The nullability, default, or other characteristics of the columns of the existing table do not exactly match the characteristics of the corresponding columns in the select list of the fullselect.

15 The conversion cannot be performed if there are any other table alterations in the same ALTER TABLE statement.

16 The table is not a materialized query table, and alteration of materialized query table properties was specified.

System action: The statement cannot be processed.

Programmer response: Depending on *reason-code*, take the following action:

reason-code
  Action

2 There is no need to convert this table. No action is required.

4 Drop any triggers, and try the ALTER TABLE statement again.

5 Drop any check constraints, and try the ALTER TABLE statement again.

6 Drop any unique constraint and unique indexes. Try the ALTER TABLE statement again.

7 Drop the referential constraints, and try the ALTER TABLE statement again.

8 Drop the materialized query table that references the table, and try ALTER TABLE statement again.

9 A materialized query table cannot reference

itself. Modify the fullselect to remove the direct or indirect reference to the table being altered.

10 The operation is not allowed since the table is already a materialized query table.

11 Modify the fullselect to include the correct number of columns in the select list.

12 Modify the fullselect so that the result column data types exactly match the data types of the corresponding existing columns.

13 Modify the fullselect so that the result column names exactly match the column names of the corresponding existing columns.

14 The table cannot be converted to a materialized query table unless the the nullability characteristics can be matched. Create a new materialized query table instead.

15 Perform the other table alterations in an ALTER TABLE statement that do not include the ADD MATERIALIZED QUERY clause.

16 Either correct the table name to specify a materialized query table, or use the ALTER TABLE statement to convert the table to a materialized query table with the required properties.

SQLSTATE: 428EW

-20100 **AN ERROR OCCURRED WHEN BINDING A TRIGGERED SQL STATEMENT. INFORMATION RETURNED: SECTION NUMBER :** *section-number* **SQLCODE** *sqlerror*, **SQLSTATE** *sqlstate*, **AND MESSAGE TOKENS** *token-list*

Explanation: During execution of a CREATE TRIGGER statement, the SQL statements specified in the triggered action are bound into a trigger package. During that processing, an error was discovered in one of those statements.

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 when binding the statement.

sqlstate The corresponding SQLSTATE for the SQLCODE received when binding the statement.

token-list
  The list of tokens from the original SQL error. This list might be truncated.

System action: The CREATE TRIGGER statement was not processed. The trigger and the trigger package were not created.

Programmer response: Use the section number determine the failing triggered SQL statement. Refer to the explanation of the reported SQLCODE. Follow the action suggested by that message.

SQLSTATE: 56059

| **-20101** **THE FUNCTION** *function-name* **FAILED WITH REASON** *reason-code*

| **Explanation:** The statement attempted to process a
| function, but processing failed.

| *function-name*
| The name of the function that could not be
| processed, either a DB2 for z/OS function or a
| DB2 DLL and routine.

| *reason-code*
| A hexadecimal value that indicates the reason
| for the failure. Possible values are DB2 for
| z/OS codes 00E73001, 00E73002, 00E73003,
| and 00E73004, and the following values:

| **00A0C11C**
| CELAAUTH services attempted to
| load a DLL that does not exist. The
| DLL load failed. The DLL is identified
| by the first part of the *function-name*
| value: *dll-name*!*routine-name*.

| **00A103B0**
| All existing Language Environment®
| environments are in use and the
| maximum number of Language
| Environments permitted has been
| reached. No additional environments
| can be created.

| **00A14348**
| During CELAAUTH services
| infrastructure initialization,
| CELAAUTH attempted to load the
| 64-bit Language Environment library.
| However, the load failed.

| **System action:** The statement cannot be processed.

| **Programmer response:** Correct the condition that is
| described by the *reason-code* value.

| **00A0C11C**
| Make sure that the DLL that is identified by
| *function-name* is properly installed and is
| accessible to the DB2 subsystem.

| **00A103B0**
| No immediate action is required. If this

situation occurs frequently, consider increasing the LEMAX parameter, which controls the maximum number of environments within the DB2 subsystem.

00A14348

Make sure that CELQLIB is in the library load search path.

00E73001

Use the information provided for code "00E73001" on page 750.

00E73002

Use the information provided for code "00E73002" on page 750.

00E73003

Use the information provided for code "00E73003" on page 750.

00E73004

Use the information provided for code "00E73004" on page 750.

SQLSTATE: 56060

Related reference

⮞ MAXIMUM LE TOKENS field (LEMAX subsystem parameter) (DB2 Installation Guide)

-20102   **CREATE OR ALTER STATEMENT FOR ROUTINE** *routine-name* **SPECIFIED THE** *option* **OPTION WHICH IS NOT ALLOWED FOR THE TYPE OF ROUTINE**

Explanation: An option was specified that is not allowed for the type of routine 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.
- LANGUAGE SQL is not allowed for non-SQL functions or procedures.
- LANGUAGE specifying something other than SQL is not allowed for SQL functions or procedures.
- LANGUAGE JAVA is not allowed for table functions.
- PARAMETER STYLE JAVA is not allowed for table functions.
- STOP AFTER FAILURE, STOP AFTER *n* FAILURES, or CONTINUE AFTER FAILURE are not allowed for sourced functions or SQL functions.

System action: The statement cannot be processed.

Programmer response: Remove the option from the statement and reissue the failing statement.

SQLSTATE: 42849

-20104   **AN ATTEMPT TO ALTER A CCSID FROM** *from-ccsid* **TO** *to-ccsid* **FAILED**

Explanation: The statement attempted to alter the CCSID for a database or table space and the statement failed.

from-ccsid represents the CCSID that is currently in use for the database or table space.

to-ccsid is the CCSID that specified on the alter statement.

System action: The statement cannot be executed.

Programmer response: The SQL REFERENCE contains a list of CCSIDs that can be specified on this statement. Only these CCSIDs can be altered, and then, only to the corresponding value listed in the table. Altering the CCSID of a database or table space to a value not listed in the table is not permitted.

SQLSTATE: 42856

-20106   **THE CCSID FOR THE TABLE SPACE OR DATABASE CANNOT BE CHANGED BECAUSE THE TABLE SPACE OR DATABASE ALREADY CONTAINS A TABLE THAT IS REFERENCED IN EXISTING VIEW, OR MATERIALIZED QUERY TABLE DEFINITIONS OR AN EXTENDED INDEX**

Explanation: An ALTER statement cannot be used to alter the CCSID for a table space or database that contains a table that is referenced in an existing view, or materialized query table definitions, or a table that already has an extended index.

System action: The statement cannot be executed.

Programmer response: To alter the CCSID for the specified space, complete the following steps:

1. Drop any existing view or materialized query table definitions that refer to tables contained in the identified space.
2. Drop all of the extended indexes created on the table.
3. Reissue the ALTER statement.

SQLSTATE: 42945

-20107   **HOST VARIABLE OR PARAMETER NUMBER** *position-number* **CANNOT BE USED AS SPECIFIED BECAUSE REASON** *reason*

Explanation: DB2 received data that could not be used as specified in the statement because it is not convertible to an acceptable format in this machine environment.

position-number identifies either the host variable

number (if the message is issued as a result of an INSERT, UPDATE, MERGE, DELETE, SELECT, SET, or VALUES statement), or the parameter number (if the message is issued as the result of a CALL statement, or the invocation of a function).

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 *z/Architecture Principles of Operation* (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.

SQLSTATE: 53022

-20108   **A RESULT SET CONTAINS AN UNSUPPORTED DATA TYPE IN POSITION NUMBER** *position-number* **FOR CURSOR** *cursor-name* **OPENED BY STORED PROCEDURE** *procedure-name*

Explanation: Stored procedure *procedure-name* cannot return one or more query result sets. *cursor-name* indicates the first query result set that the stored procedure cannot return. The column at *position-number* in the query result set contains a data type that is not supported by the requester or the server.

System action: The CALL statement cannot be executed.

Programmer response: Modify the stored procedure at the server to return result sets that include only data types that are supported by the requester. You may also upgrade the level of code at the requester to one that supports the data type(s) that were returned by the server.

SQLSTATE: 56084

-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.

SQLSTATE: 51036

-20111   **CANNOT ISSUE SAVEPOINT, RELEASE SAVEPOINT, ROLLBACK TO SAVEPOINT FROM A TRIGGER, FROM A USER-DEFINED FUNCTION, OR FROM A GLOBAL TRANSACTION**

Explanation: The following statements cannot be used in the body of a trigger, global transaction, or user-defined function:

• SAVEPOINT
• RELEASE SAVEPOINT
• ROLLBACK TO SAVEPOINT

System action: The statement is not processed.

Programmer response: Correct the logic of the application program so that this error does not occur.

SQLSTATE: 3B503

Related reference

➦ SAVEPOINT (DB2 SQL)

➦ RELEASE SAVEPOINT (DB2 SQL)

➦ ROLLBACK (DB2 SQL)

-20123   **CALL TO STORED PROCEDURE** *procedure* **FAILED BECAUSE THE RESULT SET RETURNED FOR CURSOR** *cursor* **IS SCROLLABLE, BUT THE CURSOR IS NOT POSITIONED BEFORE THE FIRST ROW**

Explanation: A scrollable result set for cursor cursor has been returned by a CALL to stored procedure procedure, and one or more of these cursors is not positioned before the first row.

System action: The Call to the stored procedure was unsuccessful. All result set cursors defined in the stored procedure were closed before returning to the caller. The scrollable cursor can not be used to FETCH from the result set. Actions completed by the stored procedure are not rolled back, and any external actions initiated by the stored procedure have completed because the error was detected upon completion of the stored procedure.

Programmer response: Modify the content of the stored procedure to ensure that the result set cursors are positioned before the first row before returning to the caller.

SQLSTATE: 560B1

-20124   **OPEN CURSOR** *cursor* **FAILED BECAUSE THE CURSOR IS SCROLLABLE BUT THE CLIENT DOES NOT SUPPORT THIS**

Explanation: The cursor *cursor* has been defined as scrollable, but the client is downlevel and does not support scrollable cursors. The DRDA Application Requestor is not able to process scrollable result sets.

System action: The statement cannot be processed.

Programmer response: Modify the definition of the cursor to not be scrollable.

SQLSTATE: 560B2

-20125   **CALL TO STORED PROCEDURE** *procedure-name* **FAILED BECAUSE THE RESULT SET FOR CURSOR** *cursor-name* **IS SCROLLABLE, BUT THE CLIENT DOES NOT SUPPORT THIS**

Explanation: A scrollable result set for a cursor has been returned by a CALL for a stored procedure, but the client is downlevel and does not support scrollable cursors. The DRDA Application Requestor is not able to process scrollable result sets.

procedure-name
        The stored procedure that failed.

cursor-name
        The scrollable cursor.

System action: The statement cannot be processed. All result set cursors that are defined in the stored procedure were closed before returning to the caller. The scrollable cursor cannot be used to FETCH from the result set. Actions that were completed by the stored procedure are not rolled back, and any actions that were initiated by the stored procedure have completed because the error was detected at the end of the execution of the stored procedure.

Programmer response: Modify the content of stored procedure *procedure-name* to not define result set cursors as scrollable.

SQLSTATE: 560B3

-20127   **VALUE SPECIFIED ON FETCH STATEMENT FOR ABSOLUTE OR RELATIVE IS TOO LARGE FOR DRDA**

Explanation: The value that was specified after ABSOLUTE or RELATIVE on a FETCH statement is larger than 64 bits. DRDA limits this specification to 64 bits.

System action: The statement cannot be processed.

Programmer response: Modify the scroll specification on the FETCH statement.

SQLSTATE: 54051

-20129   **LOCAL SPECIAL REGISTER IS NOT VALID AS USED**

Explanation: The CURRENT PACKAGE PATH special register and local special registers, such as CURRENT SERVER and CURRENT PACKAGESET, cannot be used in an expression that is on the right side of a SET host-variable assignment statement.

The only valid uses of these special registers in a SET host-variable assignment statement are:
- SET *:hv* = CURRENT SERVER;
- SET *:hv* = CURRENT PACKAGESET;
- SET *:hv* = CURRENT PACKAGE PATH;

System action: The statement cannot be executed.

Programmer response: Do not use local special registers or the CURRENT PACKAGE PATH special register in expressions that are on the right side of SET host-variable assignment statements.

SQLSTATE: 560B5

-20142   **SEQUENCE** *sequence-name* **CANNOT BE USED AS SPECIFIED**

Explanation: The sequence was referenced in a context in which it cannot be used.

sequence-name
        The name of the sequence.

The sequence was an invalid reference to a system-generated sequence object. The sequence was generated by the system for an identity or DB2_GENERATED_DOCID_FOR_XML column. These sequences cannot be referenced in:
- An ALTER SEQUENCE statement
- A DROP SEQUENCE, COMMENT ON SEQUENCE, GRANT, or REVOKE statement
- A NEXT VALUE or PREVIOUS VALUE expression

System action: The statement cannot be processed.

Programmer response: Specify the name of a user-defined sequence object in this context.

SQLSTATE: 428FB

-20143   **THE ENCRYPTION OR DECRYPTION FUNCTION FAILED, BECAUSE THE ENCRYPTION PASSWORD VALUE IS NOT SET**

Explanation: The ENCRYPTION PASSWORD value is not set.

System action: The statement cannot be executed

Programmer response: Issue the SET ENCRYPTION PASSWORD statement to set the ENCRYPTION PASSWORD value. The length of the PASSWORD must be a minimum of 6 bytes and a maximum of 127 bytes.

| **SQLSTATE:** 51039

| **-20144** THE ENCRYPTION IS INVALID
| BECAUSE THE LENGTH OF THE
| PASSWORD WAS LESS THAN 6
| BYTES OR GREATER THAN 127
| BYTES

| **Explanation:** The data must be encrypted with a
| password length between 6 and 127 bytes.

| **System action:** The statement cannot be executed

| **Programmer response:** Ensure that your password
| length is between 6 and 127 bytes in length.

| **SQLSTATE:** 428FC

| **-20146** THE DECRYPTION FAILED. THE
| DATA IS NOT ENCRYPTED

| **Explanation:** The data must be encrypted before it is
| decrypted.

| **System action:** The statement cannot be executed

| **Programmer response:** Ensure that the data being
| decrypted has been encrypted using the
| ENCRYPT_TDES built-in-function.

| **SQLSTATE:** 428FE

| **-20147** THE ENCRYPTION FUNCTION
| FAILED. MULTIPLE PASS
| ENCRYPTION IS NOT SUPPORTED

| **Explanation:** Data that has already been encrypted,
| cannot be encrypted again.

| **System action:** The statement cannot be executed

| **Programmer response:** Ensure that the data that is
| being encrypted has not already been encrypted.

| **SQLSTATE:** 55048

-20163 HEXADECIMAL CONSTANT GX IS
NOT ALLOWED

Explanation: A hexadecimal graphic string constant,
GX, was used in a statement when one of the following
two conditions was true:

- The MIXED DATA install option is set to NO.
- The application encoding scheme is UNICODE.
- The GX constant was specified as a column default
  value in a WITH DEFAULT clause.
- The GX constant was specified as a limit key value
  in an ENDING AT clause.

System action: The statement cannot be executed.

Programmer response: If your data is not graphic, use
an X hexadecimal constant instead of a GX constant. If
your MIXED DATA install option is set to NO, contact
your system administrator to set up the installation

options properly for use with the GX constant. If your
application encoding scheme is UNICODE, use a UX
hexadecimal constant instead of GX.

SQLSTATE: 560B9

-20165 AN SQL DATA CHANGE STATEMENT
WITHIN A FROM CLAUSE IS NOT
ALLOWED IN THE CONTEXT IN
WHICH IT WAS SPECIFIED

| **Explanation:** An SQL data change statement cannot be
| specified in the FROM clause in specific contexts. The
| SQL data change statement must be the only
| table-reference in the FROM clause that is used in:

| - the outer fullselect of a SELECT statement, that is a
| subselect
| - a SELECT INTO statement

System action: The statement cannot be processed.

| **Programmer response:** Change the statement so that
| the SQL data change statement within a FROM clause
| is used in a supported context and is the only
| table-reference in the FROM clause.

SQLSTATE: 428FL

-20166 AN SQL DATA CHANGE STATEMENT
WITHIN A SELECT SPECIFIED A
VIEW *view-name* WHICH IS NOT A
SYMMETRIC VIEW OR COULD NOT
HAVE BEEN DEFINED AS A
SYMMETRIC VIEW

| **Explanation:**

| The target view of the SQL data change statement
| within a SELECT statement must be defined WITH
| CASCADED CHECK OPTION, or the fullselect in the
| view definition (or the fullselect of a view definition of
| a referenced view) must be able to be defined using
| WITH CASCADED CHECK OPTION.

| A symmetric view is a view defined implicitly or
| explicitly with the WITH CASCADED CHECK
| OPTION.

System action: The statement cannot be processed.

Programmer response: Do not use the SQL data
change statement within a SELECT with the specified
view.

SQLSTATE: 428FM

-20177 SET DATA TYPE CLAUSE ON ALTER
TABLE SPECIFIED FLOATING POINT,
BUT THIS CHANGE IS DISALLOWED

Explanation: The SET DATA TYPE clause of an
ALTER TABLE statement specified floating point as the
new data type. However, there is an existing unique
index or constraint that is defined on the column. This

type of change is not allowed when unique indexes or constraints are defined on the column to be changed.

Programmer response: Change the statement to specify a different compatible data type, and resubmit the statement.

SQLSTATE: 530A1

| -20178 | **VIEW** *view-name* **ALREADY HAS AN INSTEAD OF** *operation* **TRIGGER DEFINED** |

Explanation: The view *view-name* already has an INSTEAD OF trigger defined for the indicated operation (UPDATE, DELETE, INSERT). Only one INSTEAD OF trigger can be defined for each operation on the view.

System action: The statement cannot be processed. The INSTEAD OF trigger was not created.

Programmer response: If a new INSTEAD OF trigger is required, drop the existing trigger and then create the new trigger.

SQLSTATE: 428FP

| -20179 | **THE INSTEAD OF TRIGGER CANNOT BE CREATED BECAUSE THE VIEW** *view-name* **IS DEFINED USING THE WITH CHECK OPTION** |

Explanation: An INSTEAD OF trigger cannot be defined on a symmetric view, which is a view defined using WITH CHECK OPTION. It also cannot be defined on a view on which a symmetric view has been defined directly or indirectly. The view *view-name* might be the target view of the INSTEAD OF trigger, or it might be a view that depends directly or indirectly on the target view of the trigger.

System action: The statement cannot be processed. The INSTEAD OF trigger was not created.

Programmer response: The INSTEAD OF trigger cannot be defined on the view unless the symmetric view is replaced by a view that is not symmetric. The view has to be dropped and recreated in order to allow an INSTEAD OF trigger.

SQLSTATE: 428FQ

| -20180 | **COLUMN** *column-name* **IN TABLE** *table-name* **CANNOT BE ALTERED AS SPECIFIED** |

Explanation: Column *column-name* cannot be altered for one of the following reasons:

- ALTER COLUMN cannot be specified on ALTER TABLE if:
  - The table is defined with DATA CAPTURE CHANGES

  - The column is involved in a referential integrity constraint (either as part of the parent key or foreign key)
  - The column is involved in an extended index definition
  - The column has a field procedure defined
  - The column is an identity column or a row change timestamp column
- Additionally, SET DATA TYPE cannot be specified on ALTER TABLE if:
  - The table is a materialized query table
  - The table has an edit procedure or valid procedure
  - The column is involved in an extended index definition
  - VARBINARY was specified as the target data type and the column is defined as CHAR FOR BIT DATA, VARCHAR FOR BIT DATA, or BINARY, and it is defined with the DESC attribute in an index.

System action: The statement cannot be executed.

Programmer response: Change the name of the column to a column that can be altered, or drop and recreate the table with the necessary attributes. If the column is used in an index which contains expression, drop the index and alter the column with the necessary attributes, and then recreate the index.

SQLSTATE: 428FR

| -20181 | **COLUMN CANNOT BE ADDED TO INDEX** *index-name* |

Explanation: An ALTER INDEX ADD COLUMN statement attempted to add a column to an index that:

- Is an auxiliary index.
- Enforces a primary key, unique key, or referential constraint.
- Enforces uniqueness of values for a ROWID column.
- Is a partitioning index, and index-based partitioning is being used.
- Is an XML index or an extended index.

index-name
    The name of the index.

System action: The statement cannot be processed.

Programmer response: Change the statement to refer to an index that can have a column added to it, or drop and re-create the index, including all of the desired columns.

SQLSTATE: 428FS

| -20182 | PARTITIONING CLAUSE *clause* ON *stmt-type* STATEMENT FOR *index-name* IS NOT VALID |

Explanation: The *values* PARTITIONING clause was not accepted on CREATE or ALTER INDEX statement for one of the following reasons:

- On ALTER INDEX, if the table uses table-*based* CONTROLLED partitioning, or if the index is a partitioning index created in Version 8 or later releases.
- On CREATE INDEX, *values* partitioning attributes were specified on a previous CREATE or ALTER TABLE statement for the table.
- On CREATE INDEX, if the partitioning scheme of the index is predetermined by that of the underlying data.
- On ALTER TABLE, when altering partition limit key values, if there are any large object (LOB) columns in the table.

System action: The statement cannot be executed.

Programmer response: Change the name of the index to an index for which the *values* partitioning clause would be valid, and resubmit the statement.

SQLSTATE: 530A2

| -20183 | THE PARTITIONED, ADD PARTITION, ADD PARTITIONING KEY, ALTER PARTITION, ROTATE PARTITION, OR PARTITION BY RANGE CLAUSE SPECIFIED ON CREATE OR ALTER FOR *table-name* IS NOT VALID |

Explanation: A clause was specified for a statement, but the clause is not valid for the indicated table.

table-name
> The name of the table.

The PARTITIONED, ADD PARTITION, ADD PARTITIONING KEY, ALTER PARTITION, and ROTATE PARTITION clauses cannot be specified on ALTER TABLE, CREATE INDEX, or CREATE TABLE in the following cases:

- The table is a non-partitioned table.
- The table is a materialized query table.
- A materialized query table is defined on this table.
- The table is in a partition-by-growth table space. If a PARTITION BY size clause was specified on the created table statement, then the table is created in a partition-by-growth table space.
- The ADD PARTITIONING KEY clause cannot be specified if the table is already complete by having established either table-based partitioning or index-based partitioning.

- The ROTATE PARTITION clause cannot be specified if:
  - The table definition is incomplete.
  - The table contains only one partition.

System action: The statement cannot be processed.

SQLSTATE: 428FT

| -20185 | CURSOR *cursor-name* IS NOT DEFINED TO ACCESS ROWSETS, BUT A CLAUSE WAS SPECIFIED THAT IS VALID ONLY WITH ROWSET ACCESS |

Explanation: The FOR ROW *n* OF ROWSET clause was specified on a FETCH statement, but the cursor is not defined for rowset access.

System action: The statement cannot be processed.

Programmer response: Remove the FOR *n* ROWS clause from the FETCH statement, or redefine the cursor for multiple row access with the WITH ROWSET POSITIONING clause on DECLARE CURSOR or PREPARE.

SQLSTATE: 24518

| -20186 | A CLAUSE SPECIFIED FOR THE DYNAMIC SQL STATEMENT BEING PROCESSED IS NOT VALID |

Explanation:

A clause was not valid for one of the following reasons:

- On a PREPARE statement, a FOR SINGLE ROW or FOR MULTIPLE ROWS clause was specified. However, the statement that was being prepared was not an INSERT with a *multiple-row-insert* clause or a MERGE statement.
- On a PREPARE statement, an ATOMIC or NOT ATOMIC clause was specified. However, the statement that was being prepared was not an INSERT statement with a *multiple-row-insert* clause.
- On a PREPARE statement, a *rowset-positioning* clause was specified. However, the statement that was being prepared was not a *select-statement*.
- On a PREPARE statement, a SENSITIVE DYNAMIC clause and SCROLL clause were specified. However, the content of the query requires the use of a temporary table for processing.
- On an EXECUTE statement, a source-row-data clause was specified. However, the statement that was being executed was not an INSERT with a *multiple-row-insert* clause or a MERGE statement.
- On an EXECUTE statement, a multiple-row-insert clause was specified. However, the statement that was being executed was not an INSERT statement with a *multiple-row-insert* clause.
- On an EXECUTE statement, a multiple-row-insert clause was specified. However, the statement that

was being executed was not an INSERT statement with a *multiple-row-insert* clause, that was prepared with FOR MULTIPLE ROWS specified as part of the ATTRIBUTES clause on the PREPARE statement.

- On an EXECUTE statement, a source-row-data clause was not specified. However, the statement that was being executed was an INSERT with a *multiple-row-insert* clause or MERGE statement, and FOR MULTIPLE ROWS was specified as part of the ATTRIBUTES clause on the PREPARE statement.

- On an EXECUTE statement, a FOR *n* ROWS clause was specified. However, the INSERT statement or the MERGE statement that was being executed also contained a FOR *n* ROWS clause.

- On an EXECUTE statement, host variable arrays were provided. However, the FOR *n* ROWS clause was not specified (on either the EXECUTE or INSERT or MERGE statement).

See chapter 2 of *SQL Reference* for more information on the SQL statements and clauses.

System action: The statement cannot be processed.

Programmer response: Remove the clause that was not valid in the context in which it was used.

SQLSTATE: 07501

-20200 **THE INSTALL OR REPLACE OF** *jar-id* **WITH URL** *url* **FAILED DUE TO REASON** *reason-code-(reason-string)*.

Explanation: The URL that was specified on the install or replace JAR procedure did not identify a valid JAR file.

jar-id Name of the JAR that was specified for SQLJ.INSTALL_JAR or SQLJ.REPLACE_JAR

url Up to 80 characters of the URL are displayed.

The following list shows the possible values for *reason-code -(reason-string)*:

1 (FILE NOT FOUND)
No HFS file was found with the name specified.

2 (URL FORMAT)
The URL must begin with 'file:/' or 'file://'.

3 (FILE SIZE)
The file must not be larger than 100MB.

System action: The statement cannot be processed.

User response: Reissue the install or replace the JAR procedure with a URL that identifies a valid JAR file.

SQLSTATE: 46001

-20201 **THE INSTALL, REPLACE, REMOVE, OR ALTER OF** *jar-name* **FAILED DUE TO REASON** *reason-code-(reason-string)*

Explanation: The JAR name *jar-name* that was specified on the alter, install, replace, or remove JAR procedure is not valid. For example, this message is issued for the following reasons:

- The JAR name has the improper format.
- The JAR cannot be installed because it already exists.
- The JAR cannot be altered, replaced, or removed because it does not exist.

The following list shows the possible values for *reason-code-(reason-string)*:

1 (UNDEFINED JAR)
A JAR with the name specified on ALTER_JAVA_PATH, REPLACE_JAR, or REMOVE_JAR does not exist in DB2.

2 (SCHEMA LENGTH)
In the *jar-name* parameter, the schema delimiter period ('.') appears after more than 128 bytes, but the schema has a maximum length of 128 bytes.

3 (NAME LENGTH)
In the *jar-name* parameter, more than 128 bytes appear after the schema delimiter or the default schema is used, and the JAR name exceeds the maximum length of 128 bytes.

4 (PARSER ERROR)
During ALTER_JAVA_PATH, INSTALL_JAR, or REMOVE_JAR processing, the DB2 parser was invoked and returned an error message. This error can occur due to invalid characters or an invalid length of the *jar-name* parameter.

5 (DUPLICATE JAR)
A JAR with the name specified on INSTALL_JAR already exists in DB2.

System action: The statement cannot be processed.

User response: Take the following actions as appropriate:

- Ensure that the JAR identifier has the correct format.
- If the JAR already exists, remove it before you reinstall it.
- If you want to alter, remove, or replace procedures within the JAR, ensure that the JAR exists.

SQLSTATE: 46002

-20202 **THE REMOVE OF** *jar-name* **FAILED AS** *class* **IS IN USE**

Explanation: The specified JAR file is currently in use by an existing routine.

jar-name
    The JAR that is being removed.

class   The string, 'CLASS'

System action: The statement cannot be processed.

User response: Ensure that all routines that reference the JAR file that is being removed are dropped, and resubmit the remove procedure.

SQLSTATE: 46003

-20203   **USER-DEFINED FUNCTION OR PROCEDURE** name **HAS A JAVA METHOD WITH AN INVALID SIGNATURE. THE ERROR IS AT OR NEAR PARAMETER** number**. THE SIGNATURE IS** signature**.**

Explanation: The signature of the java method that was used to implement the function or procedure was invalid. For example, the method may have parameters that are not mappable to the parameters on the corresponding CREATE PROCEDURE statement.

name   identifies the specific name of the external Java function or procedure whose signature caused the error

number   indicates the position of the parameter within the signature closest to the error

signature
    provides at most the first 100 characters of the invalid signature

System action: The statement is not executed.

Programmer response: Reissue the corresponding CREATE statement specifying parameters that match the Java method, or correct the specified procedure or function signature.

SQLSTATE: 46007

-20204   **THE USER-DEFINED FUNCTION OR PROCEDURE** routine-name **WAS UNABLE TO MAP TO A SINGLE JAVA METHOD**

Explanation: A CREATE or ALTER FUNCTION or PROCEDURE statement for routine-name specified a Java method in the EXTERNAL NAME clause that cannot be used. The EXTERNAL NAME clause did not contain a matching Java method, or contained more than one matching Java method.

System action: The statement cannot be processed.

Programmer response: The EXTERNAL NAME clause of the identified function or procedure must be altered to uniquely identify a valid Java method for the routine, or the Java class must be changed to have a single method with the specified or implicit signature.

SQLSTATE: 46008

-20207   **THE INSTALL OR REMOVE OF** jar-name **SPECIFIED THE USE OF A DEPLOYMENT DESCRIPTOR.**

Explanation: The DEPLOY or UNDEPLOY parameter of the install or remove jar procedure for jar-name was non-zero. Use of deployment descriptors is not supported, and this parameter must be zero.

System action: The JAR is not installed, or removed.

User response: Reissue the INSTALL_JAR or REMOVE_JAR procedure call with the DEPLOY or UNDEPLOY parameter set to zero.

SQLSTATE: 46501

-20210   **THE SQL STATEMENT CANNOT BE EXECUTED BECAUSE IT WAS PRECOMPILED AT A LEVEL THAT IS INCOMPATIBLE WITH THE CURRENT VALUE OF THE ENCODING BIND OPTION OR SPECIAL REGISTER**

Explanation: The SQL statement was precompiled at a level prior to Version 7, but the current value of the ENCODING bind option or special register does not represent the system EBCDIC CCSIDs. The information that is necessary to execute the SQL statement is unavailable for processing, and the SQL statement cannot be successfully completed. Additional processing of the SQL statement is terminated.

An application that was precompiled prior to DB2 Version 7 may not be bound, either implicitly or explicitly, with an ENCODING bind option of anything other than ENCODING(EBCDIC) or ENCODING(ccsid) where ccsid represents the system EBCDIC CCSID. If the value of MIXED DATA for the system is YES, then ccsid must be the default EBCDIC mixed CCSID. Otherwise, ccsid must be the default EBCDIC single byte CCSID.

System action: The statement cannot be executed.

Programmer response: To correct the situation, you can:

* Precompile the program again using the current precompiler and reissue the BIND command

* Reissue the BIND command using ENCODING(EBCDIC) or ENCODING(ccsid) where ccsid represents the system EBCDIC CCSID.

SQLSTATE: 560B8

-20211   **THE SPECIFICATION ORDER BY OR FETCH FIRST N ROWS ONLY IS INVALID**

Explanation: An ORDER BY or FETCH FIRST n ROWS ONLY clause is not allowed:

* In the outer fullselect of a view definition

* In a materialized query table definition

- In a subselect that is not the outermost fullselect, unless it is enclosed in parentheses

System action: The statement cannot be processed.

Programmer response: Correct the failing statement. If the failing statement is CREATE VIEW, specify the ORDER BY or FETCH FIRST clause in SQL statements that refer to the view instead.

SQLSTATE: 428FJ

-20212   **USER-DEFINED ROUTINE** *name* **ENCOUNTERED AN EXCEPTION ATTEMPTING TO LOAD JAVA CLASS** *class-name* **FROM JAR** *jar-name*. **ORIGINAL EXCEPTION:** *exception-string*

Explanation: A Java exception occurred while DB2 was trying to load a Java class. The error can occur when loading the class that is identified in the EXTERNAL NAME clause, or a referenced class.

The error can also occur when accessing the installed JAR identified in the EXTERNAL NAME clause, or an installed JAR in the Java path of the installed JAR that referenced this class. Possible reasons why this message could occur include:

- A class was not found.
- An I/O error occurred when the class loader reads the JAR file.
- An SQL error occurred when the BLOB that contains the JAR file from the DB2 catalog is being read by the class loader.

name   The specific name of the external Java function or procedure that caused the ClassNotFoundException.

class-name
    The Java class that DB2 was trying to load when the error occurred.

jar-name
    The JAR file that the class was being loaded from (if any JAR files happen to be involved in the class loading process).

exception-string
    The partial text of the underlying JAVA exception of the toString(), which resulted in this ClassNotFoundException (if any class is found in the search).

System action: The statement cannot be executed. A DSNX961 message describing the error will be displayed on the z/OS system console.

Programmer response: Correct the condition that is reported by the *exception-string*.

SQLSTATE: 46103

-20213   **STORED PROCEDURE** *procedure-name* **HAS RETURNED A DYNAMIC RESULT SET, PARAMETER** *number*, **THAT IS NOT VALID**

Explanation: A Java Stored Procedure has either returned a DYNAMIC RESULT SET parameter that is not an instance of the Java class that was used by the JDBC driver to represent a ResultSet, or it returned a DYNAMIC RESULT SET produced by a nested stored procedure.

procedure-name
    identifies the external Java procedure whose returned parameter caused the error.

number   indicates the position of the parameter whose returned class was invalid.

System action: The CALL statement fails.

Programmer response: Recreate the Java method to make all returned DYNAMIC RESULT SET parameters be instances of the class produced by the DB2 Universal JDBC Driver (com/ibm/db2/jcc/t2zos/ SPResultSet), and not be a DYNAMIC RESULT SET from a nested stored procedure.

SQLSTATE: 46502

-20223   **THE ENCRYPT_TDES OR DECRYPT FUNCTION FAILED. ENCRYPTION FACILITY NOT AVAILABLE** *return-code*, *reason-code*

Explanation: The encryption facility is not available, or not able to service the encryption or decryption request.

System action: The statement cannot be executed

Programmer response: If the encryption facility is not installed, then install it before using the ENCRYPT_TDES or DECRYPT functions. If the encryption facility is installed, then verify that it is working correctly. returncode and reason-code may give further information on the regarding why this message was issued. If the encryption facility is not installed, then install it before using the ENCRYPT_TDES or DECRYPT functions. If the encryption facility is installed, then verify that it is working correctly. returncode and reason-code may give further information on the regarding why this message was issued. Consult *ICSF Application Programmers Guide*, Appendix A, for the ICSF Return Code and ICSF Reason Codes for further information.

SQLSTATE: 560BF

-20224   **ENCRYPTED DATA THAT WAS ORIGINALLY A BINARY STRING CANNOT BE DECRYPTED TO A CHARACTER STRING**

Explanation: The DECRYPT_CHAR function was

invoked with an argument that represents an encrypted string that was originally a binary string. A binary string cannot be cast to a character string using the DECRYPT_CHAR function.

System action: The statement cannot be processed.

Programmer response: The encrypted value can only be decrypted using the DECRYPT_BINARY function.

SQLSTATE: 22528

-20227 **REQUIRED CLAUSE IS MISSING FOR ARGUMENT** *number* **OF** *expression*

Explanation: The *expression* expression requires that a clause be specified for argument number *number*.

- If *expression* is XMLATTRIBUTES, then an AS clause is required for the XML attribute name.
- If *expression* is XMLFOREST, then an AS clause is required for the XML element name.

System action: The statement cannot be processed.

Programmer response: Correct the statement by providing the required clause for the argument.

SQLSTATE: 42633

-20228 **A STACKED DIAGNOSTICS AREA IS NOT AVAILABLE**

Explanation: A stacked diagnostics area is only accessible from within a handler in a native SQL routine.

System action: The statement was processed.

Programmer response: Modify the application logic so that the STACKED diagnostic is only accessed from within a handler. If the routine is an external SQL procedure, STACKED cannot be used.

SQLSTATE: 0Z002

-20232 **CHARACTER CONVERSION FROM CCSID** *from-ccsid* **TO** *to-ccsid* **FAILED WITH ERROR CODE** *error-code* **FOR TABLE** *dbid.obid* **COLUMN** *column-number* **REQUESTED BY** *csect-name*

Explanation: A conversion error occurred during the conversion of a string to a different coded character set.

from-ccsid
    identifies the coded character set of the string to be converted.

to-ccsid
    identifies the coded character set to which it must be converted.

error-code
    indicates the type of error as defined as follows:

- 8 - Length exception (for example, expansion required for PC MIXED data exceeds the maximum length of the string).
- 20 -Conversion procedure error (for example, an error during Unicode/390 stage 2 conversions or an exit set the length control field of the string to an invalid value).
- 24 - The conversion services have not been setup correctly or the conversion is not supported.

dbid.obid
    gives the database id and the table obid of the object with the conversion error. This could be either the target or the source of the conversion.

column-number
    gives the column number of the failing object. This could be either the target or the source of the conversion.

csect-name
    describes the reason codes returned from DB2. Reason codes returned from DB2 begin with 'DSN' and identify the context in which the conversion was requested. Values other than those that start DSN' are returned from other DB2 platforms and are described in the documentation for the platform.

System action: The statement cannot be processed.

Programmer response: If the error-code is 24 and the conversion request is correct, refer to the section entitled "Character conversion" of *Installation Guide* for information on how to add conversion support. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

SQLSTATE: 57017

-20235 **THE COLUMN** *column-name* **CANNOT BE ADDED OR ALTERED BECAUSE** *table-name* **IS A MATERIALIZED QUERY TABLE**

Explanation: The alter table statement attempted to add or alter column *column-name* of materialized query table *table-name*. This is not allowed.

System action: The statement could not be processed.

Programmer response: Columns of materialized query tables cannot be added, altered, or dropped. Alter the materialized query table to become a regular table before adding, altering, or dropping a column.

SQLSTATE: 428FY

| -20240 | INVALID SPECIFICATION OF A SECURITY LABEL COLUMN *tablename.column-name* **REASON CODE** *reason-code* |

Explanation: For a security label column the specification of an attribute in a CREATE TABLE, or ALTER TABLE, DECLARE GLOBAL TEMPORARY TABLE, or CREATE GLOBAL TEMPORARY TABLE statement might be invalid for one of the following reasons:

1	The underlying data type of the security label column is not supported. A security label column must be defined as CHAR(8) for single-byte data.
2	An edit procedure was specified for the table with a security label column.
3	A security label column must be defined as NOT NULL WITH DEFAULT.
4	A security label column DEFAULT cannot be altered.
5	A security label column cannot be defined for a created global temporary table.
6	The data type of a security label column cannot be altered.
7	A security label column cannot be defined for a table that is the source for a materialized query table.
8	A check constraint cannot specify a security label column.

System action: The statement cannot be executed.

Programmer response: Correct the syntax and resubmit the statement.

SQLSTATE: 42963

| -20248 | ATTEMPTED TO EXPLAIN ALL CACHED STATEMENTS OR A CACHED STATEMENT WITH STMTID OR STMTTOKEN *ID-token* BUT THE REQUIRED EXPLAIN INFORMATION IS NOT ACCESSIBLE. |

Explanation: The EXPLAIN statement cannot be executed because the required explain information is not accessible due to one of the following reasons:

1. The SQL statement with specified ID or token has never been cached because dynamic statement caching was not on when the statement was executed.

2. The statement with specified ID or token was cached before but is not in cache anymore (it was either invalidated or removed from cache by LRU algorithm).

3. The current user is not authorized to explain the statement with specified ID or token.

System action: The statement cannot be executed.

Programmer response: Perform the following steps:

1. Check if dynamic statement caching is on and if the statement ID or token is correct. The EXPLAIN statement cannot be executed if dynamic statement caching has never been turned on.

2. Re-execute (or re-prepare) the statement to be explained, find the updated statement ID or token, and explain it again.

3. Correct the authorization problem and re-execute the EXPLAIN statement.

SQLSTATE: 26501

| -20249 | THE PACKAGE *package-name* NEEDS TO BE REBOUND IN ORDER TO BE SUCCESSFULLY EXECUTED (*token*) |

Explanation: The package needs to be rebound for one of the following reasons:

- Package *package-name* was bound on a system with an older maintenance level that is no longer supported. The package needs to be rebound on a system with a maintenance level that is supported.

- Package *package-name* was bound on a newer maintenance level, but it was sent to execute on a system with an older maintenance level. In this case, the APAR *token* needs to be applied to the server before executing this package.

System action: The statement cannot be executed.

Programmer response: Take the appropriate action as explained in the explanation.

SQLSTATE: 560C5

| -20252 | DIAGNOSTICS AREA FULL. NO MORE ERRORS CAN BE RECORDED FOR THE NOT ATOMIC STATEMENT |

Explanation: A statement with the NOT ATOMIC CONTINUE ON SQLEXCEPTION clause encountered more errors than could be recorded in the diagnostics area. NOT ATOMIC processing with CONTINUE ON SQLEXCEPTION allows DB2 to continue processing a statement after one or more errors is encountered. DB2 will continue processing until it is no longer able to record errors in the diagnostic area (See the GET DIAGNOSTICS statement for information on how to retrieve error information). When DB2 is no longer able to record error diagnostics, processing of the statement is terminated, and this error is returned.

System action: The statement is terminated.

Programmer response: Analyze the warning and error conditions using the GET DIAGNOSTICS statement. Determine how to change the statement to eliminate or

reduce the number of warnings and errors. It is up to the programmer to determine if a ROLLBACK or COMMIT should be issued for this message. Either is appropriate depending on the application logic.

SQLSTATE: 429BI

-20257 **FINAL TABLE IS NOT VALID WHEN THE TARGET VIEW** *view-name* **OF THE SQL DATA CHANGE STATEMENT IN A FULLSELECT HAS AN INSTEAD OF TRIGGER DEFINED**

Explanation: The fullselect includes an INSERT, UPDATE, or MERGE statement that targets a view that has an INSTEAD OF trigger defined for the SQL data change operation. The FINAL TABLE results of an INSTEAD OF trigger cannot be returned.

System action: The statement cannot be processed.

Programmer response: Drop the INSTEAD OF trigger, and reissue the statement.

SQLSTATE: 428G3

-20258 **INVALID USE OF INPUT SEQUENCE ORDERING**

Explanation: The ORDER BY clause specifies INPUT SEQUENCE, and the FROM clause of the fullselect does not specify an INSERT or MERGE statement. If the input data is not specified using a VALUES clause, or a fullselect with an ORDER BY clause on the outermost fullselect, then the ORDER BY INPUT SEQUENCE clause has no effect.

System action: The statement cannot be processed.

Programmer response: Specify a valid sort key or ensure that the input to the INSERT is a VALUES clause or an ordered fullselect.

SQLSTATE: 428G4

-20260 **THE ASSIGNMENT CLAUSE OF THE UPDATE OPERATION AND THE VALUES CLAUSE OF THE INSERT OPERATION MUST SPECIFY AT LEAST ONE COLUMN THAT IS NOT AN INCLUDE COLUMN**

Explanation: The SQL data change statement specified INCLUDE columns, and the only assignments are made to INCLUDE columns. At least one of the assignments in a data change statement must be to a column of the target of the data change statement.

System action: The statement cannot be processed.

Programmer response: Change the statement to specify an assignment to a column of the target of the UPDATE operation.

SQLSTATE: 428G5

-20264 **FOR TABLE** *table-name***,** *primary-auth-id* **WITH SECURITY LABEL** *primary-auth-id-seclabel* **IS NOT AUTHORIZED TO PERFORM** *operation* **ON A ROW WITH SECURITY LABEL** *row-seclabel***. THE RECORD IDENTIFIER (RID) OF THIS ROW IS** *rid-number***.**

Explanation: *primary-auth-id* attempted an MLS READWRITE operation on a row without having the proper Multilevel Security (MLS) authorization. The RID identifies this row.

The RID might be *N when a RID identifier is not available for the row.

System action: The operation that was attempted could not be performed.

Programmer response: If this user is authorized to perform this operation, ensure that this user has been properly defined to MLS. If the row data needs to be viewed, use DSN1PRINT.

In the case of a view or cursor, where the primary authorization ID is able to access more rows than it can update or delete, you can add the WHERE clause to limit the rows accessed, based on the security label of the primary authorization ID. The security label can be retrieved using GETVARIABLE(SYSIBM.SECLABEL).

SQLSTATE: 429BI

-20265 **SECURITY LABEL IS** *reason* **FOR** *primary-auth-id*

Explanation: User *primary-auth-id* has a blank security label, or the security label is not accessible. *reason* is BLANK or INACCESSIBLE.

System action: The operation that was attempted could not be performed.

Programmer response: Ensure the value that was specified for the security label of this user is a valid security label. If it is valid, then this error may be caused if the SECLABEL class in the Security Server has not been activated.

SQLSTATE: 42501

-20266 **ALTER VIEW FOR** *view-name* **FAILED**

Explanation: An ALTER VIEW statement was issued for *view-name*, but the view cannot be successfully regenerated.

System action: The statement cannot be processed.

SQLSTATE: 560C7

-20275 **The XML NAME** *name* **IS NOT VALID. REASON CODE =** *reason-code*

Explanation:

1 *xmlns* is used as an attribute name, or a prefix for an element or attribute name.

2 The namespace prefix in a qualified name is not declared within its scope.

3 The name for an element or attribute is not an XML QName.

4 The name of the XML processing instruction is not an XML NCName.

5 The name of the XML processing instruction cannot contain the "xml" letter string in any combination of upper or lower case.

System action: The statement cannot be processed.

Programmer response: Correct the XML name and resubmit the statement.

SQLSTATE: 42634

-20281 *primary-auth-id* **DOES NOT HAVE THE MLS WRITE-DOWN PRIVILEGE**

Explanation: This operation requires the Multilevel Security write-down privilege.

System action: This operation cannot be performed.

Programmer response: Ensure that the user has the MLS write-down privilege when write-down is in effect.

SQLSTATE: 42513

-20283 **A DYNAMIC CREATE STATEMENT CANNOT BE PROCESSED WHEN THE VALUE OF CURRENT SCHEMA DIFFERS FROM CURRENT SQLID**

Explanation: A dynamic CREATE statement was issued when the value of the CURRENT SCHEMA special register contained a value different from the content of the CURRENT SQLID special register.

System action: The statement cannot be executed.

Programmer response: Change the value of the CURRENT SCHEMA special register to be the same as the content of the CURRENT SQLID special register.

SQLSTATE: 429BN

-20286 **DB2 CONVERTED STRING** *token-type token* **FROM** *from-ccsid* **TO** *to-ccsid*, **AND RESULTED IN SUBSTITUTION CHARACTERS**

Explanation: A conversion error occurred during the conversion of a string for *token-type token* to a different coded character set. One or more substitution characters have been placed in the string during the conversion process.

System action: The statement cannot be processed.

Programmer response: Ensure that the data that is provided to DB2 can be converted from *from-ccsid* to *to-ccsid* without data loss.

SQLSTATE: 428GB

-20289 **INVALID STRING UNIT** *unit* **SPECIFIED FOR FUNCTION** *function-name*

Explanation: The statement invoked a built-in function using a string unit that is not valid with the type of data that is provided to the function. This can occur for the following reasons:

- Binary data was specified with *unit*. CODEUNITS16, or CODEUNITS32 are not valid with binary string data.
- Graphic data was specified with OCTETS as the string length unit. OCTETS is not valid with graphic data.

System action: The statement cannot be executed.

Programmer response: Change the invocation of the function to remove the invalid string length unit or change it to a valid unit for the data type being processed.

SQLSTATE: 428GC

-20295 **THE EXECUTION OF A BUILT IN FUNCTION** *function* **RESULTED IN AN ERROR REASON CODE** *reason-code*

Explanation: The execution of a built-in function (BIF), *function*, resulted in an error. The reason code, *reason-code*, further explains the reason for the error:

4 A string longer than allowed returned as a result of an UPPER or LOWER function execution. Correct the usage of the function by using a varying-length string long enough to contain the expanded result.

System action: The statement cannot be executed.

Programmer response: Correct the use of the built-in function, *function*.

SQLSTATE: 22531

-20304 **INVALID INDEX DEFINITION INVOLVING AN XMLPATTERN CLAUSE OR A COLUMN OF DATA TYPE XML. REASON CODE =** *reason-code*

Explanation: A column defined with a data type of XML is included (or missing) in the columns for the

index. The index definition is not valid for one of the following possible reason codes:

2   An XMLPATTERN clause is present but multiple index columns are specified.

4   An XMLPATTERN clause is present but the single index column specified is not defined with data type XML.

5   The path expression specified for the XMLPATTERN Clause does not start with a '/' or '//'.

6   The pattern expression does not have a name test or kind test following the '/'.

7   The pattern expression uses an unsupported axis in an axis step. Only forward axes child, attribute, descendant, self and descendant-or-self are supported.

8   The pattern expression specifies an invalid kind test or some syntax that is not a valid name test or kind test supported in a pattern expression.

9   The pattern expression specifies a predicate (an expression enclosed in square brackets). Predicates are not supported in a pattern expression of an XMLPATTERN clause.

10   The pattern expression includes XQuery syntax that is not supported in an XMLPATTERN clause and is not specifically covered by one of the other reason codes.

11   On a z/OS database server, the number of steps in the pattern expression exceeds the limit of 50 steps.

System action: The statement cannot be processed.

User response: Modify the statement based on the reason specified by the *reason-code*. Use one of the following suggestions to modify the statement:

2   If the index is intended as a key for XML data, ensure that only one column defined with a data type of XML is specified. Otherwise, remove the XMLPATTERN clause.

4   Either remove the XMLPATTERN clause or change the specified column to a single column defined with a data type of XML.

5   Ensure that the pattern expression begins with '/' or '//'. The XQuery syntax for which '/' or '//' is an abbreviation is not supported in the XMLPATTERN clause of the CREATE INDEX statement.

6   Add a name test or kind test following the '/' in the pattern expression.

7   Remove any reverse axes from the pattern expression. For example, 'parent::' must not be used as an axes in a pattern expression.

8   Check the pattern expression for kind tests or name tests that do not match the syntax specification of the XMLPATTERN clause of the CREATE INDEX statement. Correct or remove unsupported syntax.

9   Remove any predicates from the pattern expression in the XMLPATTERN clause.

10   Change the pattern expression to remove any syntax that is not valid according to the syntax specification of the XMLPATTERN clause of the CREATE INDEX statement. If the pattern expression includes an asterisk character (*), ensure that the name tests in the pattern expression correctly use the wildcard. If used with a Qname, there must be a colon before or after the wildcard character, otherwise it is considered a multiplication operator. Remove any attempt to use the asterisk as a multiplication operator from the pattern expression. You should also ensure that the XMLPATTERN clause does not include other XQuery operators, XQuery functions or XQuery FLWR (for, let, where, return) expressions.

11   Reduce the number of steps in the pattern expression. If the value to be indexed in the XML documents is actually longer than 50 steps, the index cannot be created.

SQLSTATE: 429BS

-20305   **AN XML VALUE CANNOT BE INSERTED OR UPDATED BECAUSE OF AN ERROR DETECTED WHEN INSERTING OR UPDATING THE INDEX IDENTIFIED BY** *index-id* **ON TABLE** *table-name*. **REASON CODE =** *reason-code*

Explanation: The insertion or update of an XML value failed during insertion or update of the specified index. The statement cannot proceed and the table and index remain unchanged. The schema data type and schema identifier are not applicable for all reason codes. See specific reason codes for details. The error occurred because of one of the following possible reason codes:

1   One or more XML node values in an XML value being inserted or updated exceeds a length constraint imposed by the identified index. The index on an XML column is defined to use the SQL type VARCHAR with a specific length specified. The length of one or more XMLPATTERN result values exceeds the userspecified length constraint for the VARCHAR data type.

4   At least one XML node value is a valid XML value that cannot be cast to the index data type for the identified index. That value is outside the supported range of values.

6   One or more XML node values are XML values, but those XML values span multiple records. DB2 for z/OS cannot create an index key on an XML value that spans multiple records.

System action: The statement cannot be executed.

Programmer response: Determine the index name and the XML pattern clause.

1   Use the XML pattern information to identify the set of matching XML nodes to inspect to determine which string values are beyond the limit of the length constraint specified by the index.

4   Use the XML pattern information to identify the set of matching XML nodes to inspect and compare against the data type specified for the identified index. Determine which node values exceed the range of values supported by DB2 for the index data type.

6   Use the XML pattern information to identify the set of matching XML nodes to inspect to determine which values might be spanning multiple records. Generally, large values might lead to multiple records. Large values might arise from a single large text node, or an element node with many descendant text nodes.

SQLSTATE: 23525

-20306   **AN INDEX ON AN XML COLUMN CANNOT BE CREATED BECAUSE OF AN ERROR DETECTED WHEN INSERTING THE XML VALUES INTO THE INDEX. REASON CODE =** *reason-code*

Explanation: The statement cannot proceed and the table remains unchanged. The schema data type and schema identifier are not applicable for all reason codes. See specific reason codes for details. The creation of the index on an XML column failed for one of the following possible reason codes:

1   One or more XML node values in an XML value being inserted or updated exceeds a length constraint imposed by the index that is being created. The index on an XML column is defined to use the SQL type VARCHAR with a specific length specified. The length of one or more XMLPATTERN result values exceeds the user-specified length constraint for the VARCHAR data type.

4   One or more XML node values is a valid XML value but cannot be cast to the index data type for the index being created because of DB2 limitations. DB2 does not support the entire range of XML values.

System action: The statement cannot be executed.

Programmer response: Determine the XMLPATTERN clause from the index definition.

1   Use the XML pattern information to identify the set of matching XML nodes to inspect to determine which string values are beyond the limit of the length constraint specified by the index.

4   Use the XMLPATTERN information to identify the set of matching XML nodes to inspect and compare against the data type specified for the index being created. Determine which node values exceed the range of values supported by DB2 for the index data type.

SQLSTATE: 23526

-20310   **THE REMOVE OF** *jar-name1* **FAILED, AS IT IS IN USE BY** *jar-name2*

Explanation: The JAR being removed exists in the JAVA path of another JAR.

jar-name1
      The JAR being removed.

jar-name2
      A JAR file that contains a JAVA path with a reference to *jar-name1*.

System action: The statement cannot be executed.

User response: Remove the dependency by altering the JAVA path for JAR*jar-name2* so it does not include the reference to *jar-name1*.

SQLSTATE: 4600C

-20311   **THE VALUE PROVIDED FOR THE NEW JAVA PATH IS ILLEGAL**

Explanation: The Java path cannot be resolved for one of the following reasons:

- The provided value for the Java path is not valid. The value must be either a blank or a zero-length string.
- The Java path does not conform to its required syntax.

System action: The statement cannot be executed.

User response: Based on the specific error, correct the Java path by using one of the following solutions:

- Change the specified value to a blank or a zero-length string.
- Change the Java path to conform to its required syntax.

SQLSTATE: 4600D

| -20312 | THE ALTER OF JAR *jar-id* FAILED BECAUSE THE SPECIFIED PATH REFERENCES ITSELF |

Explanation: You attempted to alter the JAR *jar-id* to contain a JAVA path that references the *jar-id*. A JAR cannot have a path that contains a reference to itself.

jar-id The JAR file that is being altered. The reference to the *jar-id* also appears in a specified Java path.

System action: The statement cannot be executed.

User response: Correct the specified JAVA path value so that it does not reference the JAR that is being altered.

SQLSTATE: 4600E

| -20313 | DEBUG MODE OPTION FOR ROUTINE *routine-name* CANNOT BE CHANGED |

Explanation: The routine, *routine-name*, was originally created with DISABLE DEBUG MODE. A routine created with this attribute cannot be changed to either ALLOW DEBUG MODE or DISALLOW DEBUG MODE with an ALTER statement.

System action: The statement cannot be executed.

User response: To change the setting of the DEBUG MODE option, drop and recreate the routine with the correct option.

SQLSTATE: 55058

| -20314 | THE PARAMETER LIST DOES NOT MATCH THE PARAMETER LIST FOR ALL OTHER VERSIONS OF ROUTINE *routine-name* |

Explanation: An inconsistency exists between the parameters for the currently active version of the routine and other versions of the routine. This error can be issued for any of the following reasons:

- The number of parameters, data types, CCSID specifications, and character data attributes (FOR BIT, SBCS, or MIXED DATA) in the parameter list must be the same as the attributes of the corresponding parameters of the currently active version of the routine and all of the other existing versions of the routine.

- An ALTER PROCEDURE statement was specified with the PARAMETER CCSID clause with a value that is different from the value determined when the procedure was initially created.

System action: The statement cannot be processed.

User response: Correct the specification of the parameter list, or change or remove the PARAMETER CCSID clause.

SQLSTATE: 428GH

| -20315 | THE CURRENTLY ACTIVE VERSION FOR ROUTINE *routine-name* (*routine-type*) CANNOT BE DROPPED |

Explanation: The ALTER statement for the SQL routine specified a DROP VERSION clause that identified the currently active version to be dropped. You cannot drop the active version of a routine.

routine-name
    The name of the routine.

routine-type
    The type of routine.

System action: The statement cannot be processed.

User response: To drop all of the versions of the routine, drop the SQL routine without identifying a particular version.

To drop the currently active version and make a different version active, complete the following steps:

1. Issue the ALTER statement for the SQL routine with the ACTIVATE VERSION clause. This statement changes which version is active.

2. Issue the ALTER statement for the SQL routine with a DROP VERSION clause. This statement identifies and drops the previously active version.

SQLSTATE: 55059

Related reference

↪ Statements (DB2 SQL)

| -20327 | THE DEPTH OF AN XML DOCUMENT EXCEEDS THE LIMIT OF 128 LEVELS |

Explanation: An XML document that is being parsed or validated, or an XML value that is being stored, is nested too deep.

System action: The statement cannot be processed.

User response: For a document or constructed XML value, reduce the number of levels of elements and attributes that are used.

SQLSTATE: 54058

| -20328 | THE DOCUMENT WITH TARGET NAMESPACE *namespace* AND SCHEMA LOCATION *location* HAS ALREADY BEEN ADDED FOR THE XML SCHEMA IDENTIFIED BY *schema name* |

Explanation: This error can occur while invoking the XSR_ADDSCHEMADOC stored procedure. There cannot be two documents with the same *targetnamespace* and *schemalocation* within an XML schema.

System action: The operation fails with this SQLCODE.

Programmer response: Change either the *namespace* or *schemalocation* of the document that is being added.

SQLSTATE: 42749

-20329   **THE COMPLETION CHECK FOR THE XML SCHEMA FAILED BECAUSE ONE OR MORE XML SCHEMA DOCUMENTS IS MISSING. ONE MISSING XML SCHEMA DOCUMENT IS IDENTIFIED BY** *uri-type* **AS** *uri*

Explanation: The XML schema registration completion processing determined that more than one XML schema document is required for a complete XML schema. The processing also determined that at least one XML schema document is missing from the XML schema repository. The missing XML schema document is identified by the *uri type* with value *uri*. The reference to the missing XML schema document may be included in one of the XML schema documents that is defined for the XML schema.

System action: The invocation of SYSPROC.XSR_COMPLETE fails with this SQLCODE.

Programmer response: Add any missing XML schema documents to the XML schema repository, and then re-invoke SYSPROC.XSR_COMPLETE.

SQLSTATE: 428GI

-20330   **THE** *object-type* **IDENTIFIED BY XML** *uri-type1 uri1* **AND XML** *uri-type2 uri2* **IS NOT FOUND IN THE XML SCHEMA REPOSITORY**

Explanation: The processing of the statement or command required the use of an XML SCHEMA from the XML schema repository that could not be found. *uri-type1* is NAMESPACE and *uri-type2* is LOCATION. If either value was null on the request, the corresponding *uri1* or *uri2* is the empty string.

System action: The statement was not executed.

Programmer response: Add the missing XML schema to the XML schema repository, and reissue the statement.

SQLSTATE: 4274A

-20331   **THE XML COMMENT VALUE** *string* **IS NOT VALID**

Explanation: The XML comment cannot contain two adjacent hyphens and cannot end in a hyphen.

System action: The statement cannot be processed.

User response: Ensure the value for the XML comment is valid.

SQLSTATE: 2200S

-20332   **THE XML PROCESSING INSTRUCTION VALUE** *string* **IS NOT VALID**

Explanation: The XML processing instruction must not contain the substring "?>".

System action: The statement cannot be processed.

User response: Ensure the value for the XML processing instruction is valid.

SQLSTATE: 2200T

-20335   **MORE THAN ONE** *xsrobject-type* **EXISTS IDENTIFIED BY XML** *uri-type1 uri1* **AND** *uri-type2 uri2* **EXISTS IN THE XML SCHEMA REPOSITORY.**

Explanation: There is more than one registered XML schema that matches the URIs used to identify it.

uri-type1 is always NAMESPACE with the XML schema target namespace as *uri1*. *uri-type2* is always LOCATION with the XML schema location in *uri2*. If either value is null, the corresponding *uri1* or *uri2* will be the empty string.

System action: The invocation of SYSFUN.DSN_XMLVALIDATE fails with this SQLCODE.

Programmer response: Use the unique XML schema ID to identify the XML schema.

SQLSTATE: 22533

-20338   **THE DATA TYPE OF EITHER THE SOURCE OR TARGET OPERAND OF AN XMLCAST SPECIFICATION MUST BE XML**

Explanation: The XMLCAST specification must have one operand that has the data type XML. The XMLCAST operation can be from one the following:

- an XML type value to an SQL type value
- from an SQL type value to and XML type value

The XMLCAST specification also accepts having both the source and target operands as XML, but if you specify the source and target operands as XML, then no actual casting operation is performed.

System action: The expression cannot be processed.

Programmer response: If both operands are SQL data types other than XML, then use the CAST specification. Otherwise, change the XMLCAST specification so that at least one operand is the XML data type.

SQLSTATE: 42815

| -20339 | XML SCHEMA *name* IS NOT IN THE CORRECT STATE TO PERFORM OPERATION *operation*

Explanation: The operation *operation* cannot be performed on the XML schema identified by *name* because it is not in the correct state. For example, the XML schema has already been completed and the operation is attempting to add additional XML schema documents.

System action: *operation* is failed with this SQLCODE.

Programmer response: If the schema has not yet been completed, invoke SYSPROC. XSR_COMPLETE and try the *operation* again. If the schema has already been completed and needs to be updated, you must first remove it or register it using a different name.

SQLSTATE: 55063

| -20340 | XML SCHEMA *xmlschema-name* INCLUDES AT LEAST ONE XML SCHEMA DOCUMENT IN NAMESPACE *namespace* THAT IS NOT CONNECTED TO THE OTHER XML SCHEMA DOCUMENTS

Explanation: The XML schema identified by identifier *xmlschema-name* includes multiple XML schema documents. At least one of these XML schema documents is not connected to the other XML schema documents registered to this XML schema.

System action: The XSR_COMPLETE call fails with this SQLCODE.

Programmer response: Correct the XML schema documents, or add a new XML schema document, so that all XML schema documents in an XML schema are connected using import, include, or redefine, beginning from the primary schema document. Use SYSPROC.XSR_REMOVE to remove the invalid schema and re-invoke the XSR stored procedures to register it with the corrected and/or new XML schema documents.

SQLSTATE: 22534

| -20345 | THE XML VALUE IS NOT A WELL-FORMED DOCUMENT WITH A SINGLE ROOT ELEMENT

Explanation: The XML value is not a well-formed document. An XML value that is being stored in a table must be a well-formed XML document with a single root element.

System action: The statement cannot be processed.

User response: Storing the XML value requires that the XML value be modified so that it is a well-formed document with a single root element. Otherwise, do not attempt store the XML value.

SQLSTATE: 2200L

| -20353 | AN OPERATION INVOLVING COMPARISON CANNOT USE OPERAND *name* DEFINED AS DATA TYPE *type-name*

Explanation: The use of the value identified by *name* defined as data type *type-name* is not permitted in operations involving comparisons. An expression resulting in a *type-name* data type is not permitted in:

- A SELECT DISTINCT statement.
- A GROUP BY clause.
- An ORDER BY clause.
- An aggregate function with DISTINCT.
- A SELECT or VALUES statement of a set operator other than UNION ALL.

System action: The statement cannot be processed.

Programmer response: The requested operation on the data type *type-name* is not supported. You can change the data type of the value to a data type that is supported using a cast or some other function.

SQLSTATE: 42818

| -20354 | INVALID SPECIFICATION OF A ROW CHANGE TIMESTAMP COLUMN FOR TABLE *table-name*

Explanation: The specification of a row change timestamp column is invalid. The specification is invalid because a row change timestamp column cannot be:

- A column of a foreign key.
- A column of a partitioning key.
- Defined for a temporary table.

The specification might also be invalid because a row change timestamp column cannot have a FIELDPROC defined for it.

System action: The statement cannot be executed.

Programmer response: Correct the syntax and resubmit the statement.

SQLSTATE: 429BV

| -20355 | THE STATEMENT COULD NOT BE PROCESSED BECAUSE ONE OR MORE IMPLICITLY CREATED OBJECTS ARE INVOLVED *reason-code*

Explanation: The statement failed for one of the following reasons, indicated by the *reason-code*:

| 1 | The statement attempted to create a table or a table space within a database that was implicitly created by DB2.

| 2 | The statement attempted to define a new

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column (using CREATE or ALTER TABLE) as LONG VARCHAR or LONG VARGRAPHIC, but the associated table space was implicitly created by DB2.

3   The statement attempted to create an auxiliary table or auxiliary index because these objects have already been implicitly created by DB2.

4   The statement attempted to drop a LOB table space, auxiliary table, or auxiliary index that was implicitly created by DB2.

System action: The statement cannot be processed.

User response: Change the statement to refer to an object that is not involved with implicitly created objects.

SQLSTATE: 429BW

-20356   **THE TABLE WITH DBID =** *dbid* **AND OBID =** *obid* **CANNOT BE TRUNCATED BECAUSE DELETE TRIGGERS EXIST FOR THE TABLE, OR THE TABLE IS THE PARENT TABLE IN A REFERENTIAL CONSTRAINT**

Explanation: The TRUNCATE statement could not be processed for one of the following reasons:

- The TRUNCATE statement would result in the activation of DELETE triggers, but the statement specified RESTRICT WHEN DELETE TRIGGERS, either implicitly or explicitly. This can occur when enabled DELETE triggers exist for the table to be truncated, and the result of the TRUNCATE statement would activate the triggers.

- The table to be truncated is the parent table of a child table, regardless of whether the child table contains rows or not, that are in a referential constraint.

dbid.obid Gives the database id and the table obid of the object with the truncation error.

System action: The statement cannot be processed.

User response: If the statement failed because of the existence of DELETE triggers, specify the IGNORE DELETE TRIGGERS clause on the TRUNCATE statement. If the statement failed because of referential constraints, use the ALTER TABLE statement to drop the referential integrity constraints, and then re-issue the TRUNCATE statement.

SQLSTATE: 428GJ

-20361   **AUTHORIZATION ID** *authorization-name* **IS NOT DEFINED FOR THE TRUSTED CONTEXT** *context-name*

Explanation: *authorization-name* attempted to reuse a trusted connection using trusted context *context-name*.

The trusted context name *context-name* cannot be used under the *authorization-name*.

This error can also occur for one of the following reasons:

- The authorization ID is allowed to use the trusted context, but authentication is required and the request to switch users did not include the authentication token.

- The authorization ID is allowed to use the trusted context , but the security label for the user is not one of the RACF SECLABEL values defined for the user.

- The authorization ID is allowed to use the trusted context, but the trusted context is disabled.

- The system authorization ID attribute of the trusted context object associated with the trusted connection has been changed.

- The trusted context object associated with the trusted connection has been dropped.

System action: The statement cannot be processed.

Programmer response: Establish a valid authorization ID to be associated with the trusted connection.

- If the authorization ID is valid but requires authentication, provide the authentication token.

- If the trusted context object is either disabled, dropped, or its system authorization ID is altered, then only the authorization ID that established the trusted connection is allowed. Provide this authorization ID.

- If the authorization ID is valid but requires a RACF security label, then define the security label in RACF for the authorization ID.

SQLSTATE: 42517

-20362   **ATTRIBUTE** *attribute-name* **WITH VALUE** *value* **CANNOT BE DROPPED BECAUSE IT IS NOT PART OF THE DEFINITION OF TRUSTED CONTEXT** *context-name*

Explanation: Attribute *attribute-name* was specified for a trusted context, but the trusted context is not defined with an attribute with this name.

System action: The statement cannot be processed.

Programmer response: Remove the name of the unsupported attribute and re-issue the statement.

SQLSTATE: 4274C

-20363   **ATTRIBUTE** *attribute-name* **WITH VALUE** *value* **IS NOT A UNIQUE SPECIFICATION FOR TRUSTED CONTEXT** *context-name*

Explanation: During the create or alter of a trusted context *context-name*, a duplicate value was specified for the *attribute-name* attribute. Attribute *attribute-name* was

specified for the trusted context with value *value*, but the combination is not unique. Each pair of attribute name and value must be unique for a trusted context.

System action: The statement cannot be processed.

Programmer response: Remove the non-unique specification of *attribute-name* and *value* and re-issue the statement.

SQLSTATE: 4274D

-20365 **A SIGNALING NAN WAS ENCOUNTERED, OR AN EXCEPTION OCCURRED IN AN ARITHMETIC OPERATION OR FUNCTION INVOLVING A DECFLOAT**

Explanation: A signaling NaN (sNaN) was encountered in an expression, arithmetic operation, or function. This message could also be issued because an expression, arithmetic operation, or function involving a DECFLOAT column or value resulted in an exception. In either case, the result is a NAN, and an error is issued.

System action: The statement cannot be executed. In the case of an INSERT, MERGE, or UPDATE operation, no data is updated or deleted. If the statement is a cursor-controlled FETCH, then the cursor will remain open, unless the exception occurred while processing an aggregate function. If the exception occurred while processing an aggregate function, it is indicated by an operation-type of AGGREGATE FUNCTION. If this is the 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.

User response: Examine the expression which prompted the warning to see if the cause of the problem can be determined. The problem might be data-dependent, in which case you must 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 you should 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.

SQLSTATE:: 22502

-20366 **TABLE WITH DBID=*dbid.obid* AND OBID= *obid* CANNOT BE TRUNCATED BECAUSE UNCOMMITTED UPDATES EXIST ON THE TABLE WITH 'IMMEDIATE' OPTION SPECIFIED IN THE STATEMENT**

Explanation: The table to be truncated contains uncommitted updates. A TRUNCATE statement with the IMMEDIATE option cannot be processed when there are uncommitted updates in the table that is the target of the TRUNCATE statement.

dbid.obid Gives the database id and the table obid of the object with the truncation error.

System action: The statement cannot be processed.

User response: Issue a COMMIT statement, and then issue the TRUNCATE statement with the IMMEDIATE option.

SQLSTATE: 57007

-20369 **AN ALTER TRUSTED CONTEXT STATEMENT FOR *context-name* ATTEMPTED TO REMOVE THE LAST CONNECTION TRUST ATTRIBUTE ASSOCIATED WITH THE TRUSTED CONTEXT**

Explanation: An ALTER TRUSTED CONTEXT statement for *context-name* specified the DROP ATTRIBUTES clause that would have resulted in removing the last connection trust attribute defined for the trusted context. This result is not allowed.

System action: The statement cannot be processed.

Programmer response: Specify the ADD ATTRIBUTES clause to specify new values for the connection trust attributes being removed, or, use the ALTER ATTRIBUTES clause to specify new values without needing a DROP ATTRIBUTES clause.

SQLSTATE: 428GK

-20372 **THE SYSTEM AUTHID CLAUSE OF A CREATE OR ALTER TRUSTED CONTEXT STATEMENT FOR *context-name* SPECIFIED *authorization-name*, BUT ANOTHER TRUSTED CONTEXT IS ALREADY DEFINED FOR THAT AUTHORIZATION ID.**

Explanation: A CREATE or ALTER TRUSTED CONTEXT statement for *context-name* specified SYSTEM AUTHID *authorization-name*, but this authorization ID is already defined to use a different trusted context. A system authorization ID that is defined as the SYSTEM AUTHID for a trusted context cannot be associated with any other trusted context as the SYSTEM AUTHID.

System action: The statement cannot be processed.

Programmer response: Change the authorization ID to be the system authorization ID for the trusted context and reissue the CREATE or ALTER statement.

SQLSTATE: 428GL

-20373 **A CREATE OR ALTER TRUSTED CONTEXT STATEMENT SPECIFIED** *authorization-name* **MORE THAN ONCE OR THE TRUSTED CONTEXT IS ALREADY DEFINED TO BE USED BY THIS AUTHORIZATION ID, PROFILE NAME, OR PUBLIC.**

Explanation: The statement specified that *authorization-name* be allowed to use the trusted context, but cannot due to one of the following reasons:

- The specified authorization ID, profile name, or PUBLIC is already defined to use the trusted context

- The profile name or authorization ID was specified more than once in the statement

The authorization ID, profile name, or PUBLIC must not already be allowed to use the trusted context, and, it can only be specified once within a statement for a trusted context.

The token *authorization-name* might return a RACF profile name. A profile name is returned as a single token in the following format: PROFILE: *profile-name*.

System action: The statement cannot be processed.

Programmer response: Complete one of the following actions based on what the error is:

- If an ALTER TRUSTED CONTEXT statement that contained an ADD USE FOR clause, and the trusted context already was defined for use by that authorization ID, profile name, or PUBLIC, use the REPLACE USE FOR clause instead to redefine the usage characteristics for the specified users to use the trusted context.

- If the authorization ID, profile name, or PUBLIC was specified more than once, remove the extra specification of *authorization-name*, and re-issue the statement.

SQLSTATE: 428GM

-20374 **AN ALTER TRUSTED CONTEXT STATEMENT FOR** *context-name* **SPECIFIED** *authorization-name* **BUT THE TRUSTED CONTEXT IS NOT CURRENTLY DEFINED TO BE USED BY THIS AUTHORIZATION ID, PROFILE NAME, OR PUBLIC**

Explanation: An ALTER TRUSTED CONTEXT statement for *context-name* attempted to replace or remove the ability for *authorization-name* to use the trusted context, but the specified authorization ID, profile name, or PUBLIC is not currently defined to use the trusted context.

The token *authorization-name* might return a RACF profile name. A profile name is returned as a single token in the following format: PROFILE:*profile-name*.

System action: The statement cannot be processed.

Programmer response: Complete one of the following actions based on what the error is:

- If an ALTER TRUSTED CONTEXT statement that contained a REPLACE USE FOR clause, and the trusted context was not already defined for use by that authorization ID, profile name, or PUBLIC, use the ADD USE FOR clause instead to define the trusted context to be used by the specified users.

- If the ALTER TRUSTED CONTEXT statement contained the DROP USE FOR clause, none of the specified authorization IDs, profile name, or PUBLIC were currently defined to use the trusted context.

SQLSTATE: 428GN

-20377 **AN ILLEGAL XML CHARACTER** *hex-char* **WAS FOUND IN AN SQL/XML EXPRESSION OR FUNCTION ARGUMENT THAT BEGINS WITH STRING** *start-string*

Explanation: An SQL expression, XML expression, or function attempted to convert an SQL string value from one of the arguments to an XML string, but the string included a character at Unicode code point *hexchar* that is not a legal XML 1.0 character. The character is included in a string that begins with the string *start-string*. The value for *hex-char* represents a Unicode character code point in the form "#xH", where H is a hexadecimal character. The following set of characters, expressed in Unicode are allowed: #x9 | #xA | #xD | [#x20-#xD7FF] | [#xE000-#xFFFD] | [#x10000-#x10FFFF]

System action: The statement cannot be processed.

User response: Remove the illegal character *hex-char* or replace it with a character that is allowed.

SQLSTATE: 0N002

-20380 **ALTER INDEX WITH REGENERATE OPTION FOR** *index-name* **FAILED. INFORMATION RETURNED: SQLCODE** *sqlcode*, **SQLSTATE** *sqlstate*, **MESSAGE TOKENS** *token-list*

Explanation: An ALTER INDEX statement was issued for *index-name*, but the index cannot be successfully regenerated.

System action: The statement cannot be executed.

Programmer response: Drop and recreate the index.

SQLSTATE: 560CC

| -20381 | ALTER INDEX WITH REGENERATE OPTION IS NOT VALID FOR *index-name* |

Explanation: The REGENERATE option is allowed only if the index is an index on expression.

System action: The statement cannot be executed.

Programmer response: Change the statement so that it refers to an index that can be regenerated.

SQLSTATE: 530A5

| -20382 | CONTEXT ITEM CANNOT BE A SEQUENCE WITH MORE THAN ONE ITEM |

Explanation: The initial context item specified as an argument of XMLQUERY function, or the XMLEXISTS predicate, is a sequence of more than one item.

System action: The statement cannot be processed.

User response: Specify a sequence with a single item as the context item.

SQLSTATE: 2200V

| -20398 | ERROR ENCOUNTERED DURING XML PARSING AT LOCATION *n text* |

Explanation: XML parsing failed during DB2 processing.

n A byte offset into the XML code being processed after the conversion of the XML to codepage UTF-8.

text Additional information describing the parsing error. This information includes the z/OS XML System Services return and reason code.

System action: The statement cannot be processed.

User response: Correct the XML coding and re-issue the SQL statement.

SQLSTATE: 2200M

| -20399 | XML PARSING OR VALIDATION ERROR ENCOUNTERED DURING XML SCHEMA VALIDATION AT LOCATION *n text* |

Explanation: XML parsing failed during validation.

n A byte offset into the XML instance document that is being validated after the conversion of the XML to codepage UTF-8.

text Additional information describing the parsing error. DB2 might also include a text description of the error when possible. The DB2 special register value CURRENT LOCALE_LC_CTYPE is used to determine the language of the error message from the XML parser. If this value is not set, the default language is EN_US.

System action: The statement is not processed.

User response: Correct the problem with the XML instance document and reissue the invocation of SYSFUN.DSN_XMLVALIDATE or SYSPROC.XDBDECOMPXML.

SQLSTATE: 2201R

| -20400 | XML SCHEMA ERROR *n text* |

Explanation: The XML schema document did not process.

n Location of the error in the schema document being processed.

text Additional information describing the parsing error. This information includes the XML4J parser error codes and text. The DB2 special register value CURRENT LOCALE_LC_CTYPE is used to determine the language of the error message from the XML parser. If this value is not set, the default language is EN_US. **Attention:** For DB2 Version 9.1 for z/OS, there is not a value for n (offset), so DB2 will return *N. In the future, if there is a value for the location, DB2 will be able to plug it in for the first token.

System action: The statement cannot be processed.

User response: Correct the problem with the XML schema document and re-issue the invocation of the SYSPROC.XSR_COMPLETE stored procedure.

SQLSTATE: 2200M

| -20409 | AN XML DOCUMENT OR CONSTRUCTED XML VALUE CONTAINS A COMBINATION OF XML NODES THAT CAUSES AN INTERNAL IDENTIFIER LIMIT TO BE EXCEEDED |

Explanation: An internal identifier that must be associated with each XML node of an XML value cannot be generated because the combination of the number of levels of XML nodes and the number of children nodes within these levels causes the identifier to overflow.

System action: The statement cannot be processed.

Programmer response: For a document or constructed XML value, reduce the number of levels of XML nodes or the number of children nodes especially at the deeper levels of XML nodes.

SQLSTATE: 560CG

| -20410 | THE NUMBER OF CHILDREN NODES OF AN XML NODE IN AN XML VALUE HAS EXCEEDED THE LIMIT NUMBER OF CHILDREN NODES

Explanation: An expression generated an XML value with an XML node that has a number of children nodes. This number exceeds the limit of 2^{32} -1 children nodes.

System action: The XQuery expression cannot be processed.

Programmer response: Rewrite the expression generating the XML value such that the number of children nodes does not exceed the limit.

SQLSTATE: 560CH

| -20411 | A FETCH CURRENT CONTINUE OPERATION WAS REQUESTED FOR *cursor-name* BUT THERE IS NO PRESERVED, TRUNCATED DATA TO RETURN

Explanation: The application issued a FETCH request with the CURRENT CONTINUE clause for cursor *cursor-name*, however, there is no preserved, truncated data that can be returned. One of the following errors might have occurred:

- An operation has occurred since the previous FETCH for this cursor that caused DB2 to discard the preserved, truncated data.

- CONTINUE was specified on the FETCH statement, but the previous FETCH for this cursor did not specify the WITH CONTINUE clause to enable preservation of truncated data.

- The cursor is open but not positioned on a row.

- A FETCH WITH CONTINUE was executed successfully, but the LOB or XML columns were not truncated.

System action: The statement is not processed. No data is written to the output host variable referenced on the FETCH.

Problem determination: Verify that the application has successfully completed a FETCH using the WITH CONTINUE clause, and, that it received a truncation warning for a LOB or XML column prior to performing the FETCH CURRENT CONTINUE operation. This verification can be done by checking the SQLWARN1 field in the SQLCA following the FETCH and by examining the output length for LOB and XML columns.

SQLSTATE: 24524

| -20412 | SERIALIZATION OF AN XML VALUE RESULTED IN CHARACTERS THAT COULD NOT BE REPRESENTED IN THE TARGET ENCODING

Explanation: Serialization of XML data may require conversion to an encoding different from the source UTF-8 encoding. If characters exist in the source encoding that cannot be represented in the target encoding, code page conversion produces substitution characters which are not allowed in the result of XML serialization.

System action: The statement cannot be processed.

Programmer response: Choose a target encoding that can represent all characters in the XML value. Unicode encodings are recommended as they can represent all characters.

SQLSTATE: 2200W

| -20422 | A CREATE TABLE, OR DECLARE GLOBAL TEMPORARY TABLE STATEMENT FOR *table-name* ATTEMPTED TO CREATE A TABLE WITH ALL THE COLUMNS DEFINED AS HIDDEN

Explanation: A CREATE TABLE or DECLARE GLOBAL TEMPORARY TABLE statement attempted to create a table in which all the columns are considered hidden. This can occur when A CREATE TABLE statement specifies HIDDEN as a part of the definition of all of the columns. This process is not allowed. At least one column in a table must not be defined as hidden.

System action: The statement cannot be processed.

Programmer response: Verify that the table definition includes at least one column that is not defined as hidden.

SQLSTATE: 428GU

| -20423 | ERROR OCCURRED DURING TEXT SEARCH PROCESSING (*server*, *index-name*, *text*)

Explanation: An error occurred during the text search processing of a CONTAINS or SCORE function.

server The server the error was encountered on.

index-name
The name of the index used in the text search processing. Note: include schema and period with the index name in a single token.

text The text returned from the OmniFind® text search product. The text is in the language specified by the CURRENT LOCALE_LC_CTYPE special register.

System action: The statement cannot be processed.

Programmer response: Contact your system administrator to check that the OmniFind text search product is successfully installed. Refer to the documentation for the OmniFind text search product for more information about *text*.

SQLSTATE: 38H10

-20424 TEXT SEARCH SUPPORT IS NOT AVAILABLE *reason-code*

Explanation: A problem with one of the text search administration tables used by DB2 was detected. The *reason-code* provides more information about the error situation:

1 One of the text search administration tables was not found (SYSIBMTS.SYSTEXTINDEXES, SYSIBMTS.SYSTEXTCOLUMNS, SYSIBMTS.SYSTEXTSTATUS, SYSIBMTS.SYSTEXTCONNECTINFO, or SYSIBMTS.SYSTEXTSERVERS).

2 There are no rows in the SYSIBMTS.SYSTEXTSTATUS text search administration table.

3 The SYSTEMSTATUS column in the SYSIBMTS.SYSTEXTSTATUS table has a value of -1 indicating that text search support is not installed.

4 The SYSTEMSTATUS column in the SYSIBMTS.SYSTEXTSTATUS table has a value of 0 indicating that the support for text search is 'stopped'.

5 The SYSTEMSTATUS column in the SYSIBMTS.SYSTEXTSTATUS table has an invalid value.

6 There are no rows in the SYSIBMTS.SYSTEXTCONNECTINFO table.

7 No OmniFind servers have been defined.

8 All servers have reached the maximum number of indexes.

9 The DB2 local location name is not defined.

10 The DB2 local host IP address is not defined.

System action: The statement cannot be processed.

Programmer response: Contact your system administrator to make sure that support for text searching is successfully setup on your system.

SQLSTATE: 38H11

-20425 *column-name* **(IN** *table-name***) WAS SPECIFIED AS AN ARGUMENT TO A TEXT SEARCH FUNCTION, BUT A TEXT INDEX DOES NOT EXIST FOR THE COLUMN**

Explanation: A CONTAINS or SCORE text search function specified *column-name* (in table *table-name*) as an argument, but a text index does not exist for this column. Therefore, text search processing cannot be performed for the column. It is possible that the column or table is not registered to OmniFind.

System action: The statement cannot be processed.

Programmer response: Make sure that the column and table are registered to OmniFind.

SQLSTATE: 38H12

-20426 CONFLICTING TEXT SEARCH ADMINISTRATION STORED PROCEDURE RUNNING ON THE SAME INDEX

Explanation: There are conflicting administration stored procedures running on the same index.

System action: The statement cannot be processed.

Programmer response: Invoke the administration stored procedure after the currently running stored procedure completes.

SQLSTATE: 38H13

-20427 ERROR OCCURRED DURING TEXT SEARCH ADMINISTRATION STORED PROCEDURE *error*

Explanation: The *error* text describes the problem found, in the language specified by the CURRENT LOCALE LC_CTYPE special register.

System action: The CALL statement fails with this SQLCODE.

Programmer response: Fix the problem indicated by *error* and re-invoke the administration stored procedure.

SQLSTATE: 38H14

-20433 AN UNTYPED PARAMETER MARKER WAS SPECIFIED, BUT AN ASSUMED DATA TYPE CANNOT BE DETERMINED FROM ITS USE

Explanation: An untyped parameter was specified and DB2 cannot determine the data type. This error can occur with a MERGE statement when an untyped parameter marker is specified for a column of the source data, and the column of the source data is referenced in multiple contexts with different assumed data types.

| **System action:** The statement cannot be processed.

| **Programmer response:** Specify an explicit CAST specification to provide the desired data type for the parameter.

| **SQLSTATE:** 429C1

| **-20444** **AN ERROR OCCURRED IN A KEY-EXPRESSION EVALUATION IN** *index-name* **INFORMATION RETURNED: SQLCODE:** *sqlcode*, **SQLSTATE:** *sqlstate*, **MESSAGE TOKEN** *token-list* **AND RID X** *rid*

| **Explanation:** During evaluation of an index key-expression for a data change statement, an SQL error condition was encountered:

| *index-name*
| The index involved when the error occurred.

| *sqlcode* The SQLCODE received by the key-expression evaluation.

| *sqlstate* The corresponding SQLSTATE for the SQLCODE received by the key-expression evaluation.

| *token-list*
| The list of tokens from the original SQL error. This list might be truncated.

| *rid* The RID of the row which fails the key-expression evaluation.

| **System action:** The statement cannot be processed.

| **System programmer response:** Use the index name and RID number to determine the failing row of the table. If the index definition is available, use the column values of the failing row to determine the failing key-expression.

| **Programmer response:** Contact your database administrator to determine why the index specified in the message received the error.

| **SQLSTATE:** 560CM

-20447 **FORMAT STRING** *format-string* **IS NOT VALID FOR THE** *function-name* **FUNCTION**

Explanation: An invalid format string was specified for the *function-name* function. The value for *function-name* could be VARCHAR_FORMAT even if the name used to invoke the function was TO_CHAR.

A valid format string for the VARCHAR_FORMAT function must:

- have a length attribute of the data type that is not greater than 255 bytes
- only contain supported format elements and supported separator characters

- not result in a string with an actual length that is greater than the length attribute of the result

System action: The statement cannot be processed.

Programmer response: Change the format string argument for the *function-name* function. Refer to *SQL Reference* for more information.

SQLSTATE: 22007

| **-20457** **THE PROCEDURE** *procedure-name* **HAS ENCOUNTERED AN UNSUPPORTED VERSION,** *version*, **FOR PARAMETER** *number*

| **Explanation:** The version, *version*, specified for the parameter in ordinal position *number* is not supported by the procedure *procedure-name*.

| **User response:** Call the procedure and specify a supported version number for the parameter. The highest supported version number for the parameter can be obtained by calling the procedure and specifying NULL for the value of this parameter.

| **SQLSTATE:** 38554

-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 SQLCA 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' - DSCINVRM
- X'220E' - DTAMCHRM

- X'1245' - PRCCNVRM
- X'2202' - QRYNOPRM
- X'220F' - QRYPOPRM
- X'2207' - RDBACCRM
- X'2204' - RDBNACRM
- X'124C' - SYNTAXRM

A two-byte 'sub-code' accompanies 'reason-codes' X'220A' (DSCINVRM), X'1245' (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:

- Description Error Code (DSCERRCD) if 'reason-code' = X'220A' (DSCINVRM).
- Syntax Error Code (SYNERRCD) if 'reason-code' = X'124C' SYNTAXRM).
- Conversational Protocol Error Code (PRCCVNCD) if 'reason-code' = X'1245' (PRCCNVRM).

Refer to the *Open Group Technical Standard, DRDA Version 3 Vol. 3: Distributed Data Management Architecture* for a detailed discussion of the semantics of the DDM terms DSCERRCD, SYNERRCD, and PRCCNVCD.

SQLSTATE: 58008

-30002 **THE SQL STATEMENT CANNOT BE EXECUTED DUE TO A PRIOR CONDITION IN A CHAIN OF STATEMENTS**

Explanation: An SQL statement was chained to PREPARE, but the PREPARE statement has received a warning SQLCODE that requires the program or end user to either re-issue the chained statement or issue a different SQL request. This error can occur only in a client/server environment.

- A distributed client using DRDA has chained an OPEN statement to a PREPARE, but the PREPARE statement received SQLCODE +495.

System action: The statement cannot be executed as chained.

Programmer response: The statement must be sent again as a separate request.

SQLSTATE: 57057

-30005 **EXECUTION FAILED BECAUSE FUNCTION NOT SUPPORTED BY THE SERVER: LOCATION** *location* **PRODUCT ID** *pppvvrr* **REASON** *reason-code (sub-code)*

Explanation: The current SQL statement failed because the SQL statement was routed to a server that does not support the requested function. The error was such that it will not preclude the successful processing of further SQL statements.

System action: The statement cannot be executed. The SQLCA is formatted.

Programmer response: Notify the DBA for assistance in analyzing the SQL statement that prompted this SQLCODE.

Problem determination: *location* identifies the name of the server that could not support the required database protocols to perform the requested function. The product identifier is in the form *pppvvrrm*. It is an eight-byte field with alphanumeric characters, and identifies the product that could not support the function. *ppp* identifies the specific database product. *vv* identifies the product version. *rr* identifies the product release level. *m* identifies the product modification level.

Possible values for *pppvvrrm*:

PPP DSN for z/OS, ARI for VM/VSE, SQL for Unix/Windows/NT, QSQ for iSeries®, and JCC for Java

vv Version number

rr Release level

m Modification level

To correct the problem, first identify the function that is not supported. To determine what function was not supported, and why, refer to the *reason-code* that was specified. Here are the possible values for *reason-code*, and the functions that they correspond to:

0010 LONG_STMTS

0020 LONG255_IDS

0030 EXTENDED_DESCRIBE

0040 EXTENDED_DIAGNOSTICS

0050 KEEP_DYNAMIC

0060 UNICODE_CONVERSION

0070 ROWSET_CURSOR

0080 DYNAMIC_SCROLLABLE_CURSOR

0090 FLEX_BLOCKING

0100 PACKAGE_PATH

0110 REOPT_ONCE

| 0120 | REOPT_ALWAYS
| 0130 | REOPT_NONE
| 0140 | SCROLL_ORIENTATION
| 0150 | DIV_SCALE
| 0160 | QUERY_INSTANCE
| 0170 | MULTIROW_INPUT
| 0180 | SQL_ATTRIBUTES
| 0190 | SQL_GET
| 0200 | SET
| 0210 | BIND_DEPLOY
| 0220 | DUP_QUERY_SEMANTICS

Lastly, you may use the *sub-code* value to further identify the problem. When non-zero, the *sub-code* consists of a one-byte code to indicate how the error was detected in the network:

- If '01'x, then the local DB2 that is acting as the requester detected the error. The LOCATION and PRDID identify the server in error.
- If '02'x, then the server detected the error. The LOCATION and PRDID identify the location and level of the local DB2 server.
- If '03'x, then an intermediate server (hop site) detected the error. The error, the LOCATION, and PRDID identify the server in error.
- If '04'x, then an intermediate server (hop site) detected the error. The error, the LOCATION, and PRDID identify the server in error.

SQLSTATE: 56072

-30020 **EXECUTION FAILED DUE TO A DISTRIBUTION PROTOCOL ERROR THAT CAUSED DEALLOCATION OF THE CONVERSATION: REASON** *reason-code (sub-code)*

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 site 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'1232' - AGNPRMRM
- 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' - QRYPOPRM
- 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 (PRCCVNCD) if reason code = X'1245' (PRCCNVRM).
- Manager Dependency Error Code (DEPERRCD) if reason code = X' 1218' (MGRDEPRM).

Refer to *Open Group Technical Standard, DRDA Version 3 Vol. 3: Distributed Data Management Architecture* for a detailed discussion of the semantics of the DDM terms DSCERRCD, SYNERRCD, PRCCNVCD, and DEPERRCD.

System action: The statement cannot be executed. The SQLCA 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.

SQLSTATE: 58009

-30021 **EXECUTION FAILED DUE TO A DISTRIBUTION PROTOCOL ERROR THAT WILL AFFECT THE SUCCESSFUL EXECUTION OF SUBSEQUENT COMMANDS OR SQL STATEMENTS: MANAGER** *manager* **AT LEVEL** *level* **NOT SUPPORTED ERROR**

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 *Open Group Technical Standard, DRDA Version 3 Vol. 3: Distributed Data Management Architecture* 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 MGRLVL in the *Open Group Technical Standard, DRDA Version 3 Vol. 3: Distributed Data Management Architecture* 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 MGRLVL in the *Open Group Technical Standard, DRDA Version 3 Vol. 3: Distributed Data Management Architecture* 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.

SQLSTATE: 58010

-30025 **EXECUTION FAILED BECAUSE FUNCTION IS NOT SUPPORTED BY THE SERVER WHICH CAUSED TERMINATION OF THE CONNECTION: LOCATION** *location* **PRODUCT ID** *product-id* **REASON** *reason-code* **(***sub-code***)**

Explanation: The current SQL statement failed because the SQL statement was routed to a server that does not support the requested function. A new connection is required to allow the successful execution of further SQL statements.

location The name of the server that could not support the required database protocols to perform the requested function.

product-id
An eight-character alphanumeric value that identifies the product that could not support the function. This value is shown in the format *pppvvrrm*, where:

ppp Identifies the specific DB2 product or operating environment:
DSN DB2 for z/OS
ARI DB2 for VSE & VM
SQL DB2 for Linux®, UNIX®, and Windows®
QSQ DB2 for i

JCC IBM Data Server Driver for JDBC and SQLJ

vv Identifies the product version.

rr Identifies the product release level.

m Identifies the product modification level.

reason-code
A numeric value that indicates the reason for the failure.

0010	LONG_STMTS
0020	LONG255_IDS
0030	EXTENDED_DESCRIBE
0040	EXTENDED_DIAGNOSTICS
0050	KEEP_DYNAMIC
0060	UNICODE_CONVERSION
0070	ROWSET_CURSOR
0080	DYNAMIC_SCROLLABLE_CURSOR
0090	FLEX_BLOCKING
0100	PACKAGE_PATH
0110	REOPT_ONCE
0120	REOPT_ALWAYS
0130	REOPT_NONE
0140	SCROLL_ORIENTATION
0150	DIV_SCALE
0160	QUERY_INSTANCE
0170	MULTIROW_INPUT
0180	SQL_ATTRIBUTES
0190	SQL_GET
0200	SET
0210	BIND_DEPLOY
0220	DUP_QUERY_SEMANTICS

sub-code
A single-byte value that indicates how the error was detected in the network. If no additional information is available, this value is 0.

'01'x The local DB2 that is acting as the requester detected the error. The values for *location* and *product-id* identify the server in error.

'02'x The server detected the error. The values for *location* and *product-id* identify the location and level of the local DB2 server.

'03'x or '04'x

An intermediate server (hop site) detected the error. The error and the values for *location* and *product-id* identify the server in error.

System action: The statement cannot be processed. The current unit of work is rolled back. The SQLCA is formatted.

Programmer response: Contact the database administrator for assistance in analyzing the SQL statement that prompted this SQLCODE.

Problem determination: Use the *reason-code* value that was specified in the code to determine which function was not supported. Use the *sub-code* value to further identify the problem.

SQLSTATE: 56073

-30030 **COMMIT REQUEST WAS UNSUCCESSFUL, A DISTRIBUTION PROTOCOL VIOLATION HAS BEEN DETECTED, THE CONVERSATION HAS BEEN DEALLOCATED. ORIGINAL SQLCODE=***original-sqlcode* **AND ORIGINAL SQLSTATE=***original-sqlstate*

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.

System action: An alert was generated. A DSNL031I 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.

SQLSTATE: 58013

-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....... ARI for DB2 Server for VSE & VM, DSN for DB2 for z/OS, QSQ for DB2 for i5/OS®, SQL for DB2 for LUW, and JCC for Java
  - 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 processed. The local DB2 is disconnected from the remote server.

Programmer response: Verify the identify of the resource that was not available. The reason the resource is unavailable is identified by the *reason-code*.

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.

SQLSTATE: 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....... ARI for DB2 Server for VSE & VM, DSN for DB2 for z/OS, QSQ for DB2 for i5/OS, SQL for DB2 for LUW, and JCC for Java
  - 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.

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.

SQLSTATE: 57013

| -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.

SQLSTATE: 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.

SQLSTATE: 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.

SQLSTATE: 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.

SQLSTATE: 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.

SQLSTATE: 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 Part 3 of *Installation Guide*.

System action: The request is not processed.

Programmer response: Ensure the RDB name was correctly specified and resubmit the job.

SQLSTATE: 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.

SQLSTATE: 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.

SQLSTATE: 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.

Common parameters that are not supported include:

X'2450'   Usually this means that the server does not support the attribute clause on prepare.

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.

SQLSTATE: 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 *Open Group Technical Standard, DRDA Version 3 Vol. 3: Distributed Data Management Architecture* 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 DSNHDECP. One or both partners might be using an incorrect CCSID, or support might need to be added. See *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 Part 3 of *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 the 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.

SQLSTATE: 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 represents a DDM reply message. *Open Group Technical Standard, DRDA Version 3 Vol. 3: Distributed Data Management Architecture* defines the valid code points for reply messages.

Values for *SVRCOD*
- The *SVRCOD* is a one-byte hexadecimal value which represents the reply messages severity code. *Open Group Technical Standard, DRDA Version 3 Vol. 3: Distributed Data Management Architecture* defines the valid *SVRCOD* for reply messages.

System action: Processing continues.

Programmer response: The cause of this error could be a mismatch in source and target manager levels or might be an internal error.

SQLSTATE: 58018

-30080   **COMMUNICATION ERROR** *code*
              (subcode)

Explanation: A SNA communications error was detected. *z/OS Communications Server SNA Programmer's LU 6.2 Reference* 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 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 *z/OS Communications Server SNA Programmer's LU 6.2 Reference* for the particular LU6.2 return codes. Consult with a communications expert to determine the cause of the communication failure.

SQLSTATE: 08001

-30081   *prot* **COMMUNICATIONS ERROR DETECTED. API=***api***, LOCATION=***loc***, FUNCTION=***func***, ERROR CODES=***rc1* *rc2 rc3*

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.

   For TCP/IP partners, this field contains the IP address of the partner.

func   The communication function that failed.

   For TCP/IP partners, this field identifies name of the socket call 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 *z/OS UNIX System Services Messages and Codes* or in *z/OS Communications Server: IP and SNA Codes*.

rc2   The second return code indicator.

   For TCP/IP partners, this field contains the TCP/IP *reason code* in hexadecimal format. The *reason code* values are documented in *z/OS UNIX System Services Messages and Codes* or in *z/OS Communications Server: IP and SNA Codes*.

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.

SQLSTATE: 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 been revoked.
- 15 (SECURITY FAILURE:*secchkcd:svcerrno*)—Authentication failed at the remote server system. Refer to the *Open Group Technical Standard, DRDA Version 3 Vol. 3: Distributed*

Data Management Architecture for a detailed discussion of the semantics of the DDM terms SECCHKCD 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 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 z/OS 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 z/OS client usage of Already Verified userids is controlled by the SECURITY_OUT column of the SYSIBM.LUNAMES or SYSIBM.IPNAMES table.
  - The client is configured to use one of the following security mechanisms but the server does not support the mechanism:
    - Encrypted userid and encrypted security-sensitive data.
    - Encrypted userid, encrypted password, and encrypted security-sensitive data.

    Client changes must be made to correct the inconsistency.
    - DB2 for z/OS 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 z/OS client usage of Already Verified userids is controlled by the SECURITY_OUT column of the SYSIBM.LUNAMES or SYSIBM.IPNAMES table.
  - The client is configured to use one of the following security mechanisms but the server does not support the mechanism:
    - Encrypted userid and encrypted security-sensitive data.
    - Encrypted userid, encrypted password, and encrypted security-sensitive data.

    Client changes must be made to correct the inconsistency.
    - DB2 for z/OS client usage of encryption security mechanism is controlled by the SECURITY_OUT column of the SYSIBM.IPNAMES table.
- 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 z/OS 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 z/OS client usage of Already Verified userids is controlled by the SECURITY_OUT column of the SYSIBM.LUNAMES or SYSIBM.IPNAMES tables.
- 26 (SWITCH USER INVALID) - The client is configured to request a trusted connection and switch user in the trusted connection. A trusted connection was not established and so the switch user request is invalid.

System action: The attempt to connect to the remote database server fails. If the server system is a DB2 for z/OS 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.

SQLSTATE: 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.

SQLSTATE: 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.

SQLSTATE: 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.

SQLSTATE: 56096

-30106   **INVALID INPUT DATA DETECTED
              FOR A MULTIPLE ROW INSERT
              OPERATION. INSERT PROCESSING IS
              TERMINATED**

Explanation: An error was detected with the input
data for one row of a multiple row insert operation. No
further rows will be inserted. For an atomic operation,
all inserted rows are rolled back. For a non-atomic
operation, rows inserted successfully before the row
containing the invalid input data was encountered are
not rolled back.

System action: The statement cannot be processed.

Programmer response: Correct the row containing the
invalid input data and submit the multiple-row
INSERT statement again for the rows that did not get
inserted.

SQLSTATE: 22527

Part 2. DB2 reason codes

Reason codes are typically presented as a value in a message that DB2 issues. The reason codes provide specific details about the circumstances of a particular instance of the message.

Chapter 3. X'C1......' codes

Reason code identifiers that begin with `00C1` communicate normal and error situations with the call attachment facility (CAF).

00C10002

Explanation: The DB2 call attachment facility control block (the CAB) indicated that a thread was present when it should not have been present.

System programmer response: Collect a DSNTRACE trace stream and request a SYSABEND or SYSUDUMP dump.

User response: Notify your system programmer.

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.

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.

System programmer response: Collect a DSNTRACE trace stream and request a SYSABEND or SYSUDUMP dump.

User response: Notify your system programmer.

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.

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.

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.

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.

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.

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).

User response: You can continue processing with a corrected request.

Problem determination: See the Explanation above.

00C10206

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: See the Explanation above.

00C10207

Explanation: The application program passed an unrecognized function parameter to the call attachment facility (CAF).

User response: You can continue processing with a corrected request.

Problem determination: See the Explanation above.

00C10208

Explanation: The call attachment facility (CAF) received requests from the same TCB to CONNECT to the DB2 subsystem and to another subsystem.

User response: You can continue processing with a corrected request.

Problem determination: See the Explanation above.

00C10209

Explanation: The call attachment facility (CAF) received an explicit call to DSNALI from a DB2 stored procedure. This is not allowed.

User response: You can continue processing with a corrected request.

00C10210

Explanation: The DSN ASUSER *userid* is not defined in this trusted context *context name*.

System action: The DSN ASUSER processing failed.

User response: Contact the system administrator to arrange for the required Trusted Context authorization.

00C10211

Explanation: The call attachment facility (CAF) failed because the requestor's authorization ID has exceeded the maximum number of concurrent sessions allowed.

System action: The connection request is not processed.

System programmer response: Determine the value of the USER.CSDATA.DSNMUCTL defined for the primary authorization ID in RACF and determine if that value needs to be updated.

Programmer response: Close or end some of the existing connections, and try the request again.

Problem determination: DB2 Version 9.1 for z/OS in a Common Criteria environment (DSN6SPRM COMCRIT= YES) restricts the number of concurrent threads for a primary authorization ID based upon the custom field USER.CSDATA.DSNMUCTL.

00C10824

Explanation: The CAB is reset and a new connection may be made.

User response: You can continue processing.

Problem determination: See the Explanation associated with message DSNA824I.

00C10831

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.

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.

00C12001

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.

00C12002

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.

Collect the following diagnostic items:

* 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.
* Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
* All dumps taken by the attachment facility or requesting application.

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.

Collect the following diagnostic items:

* 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.
* Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
* All dumps taken by the attachment facility or requesting application.

00C12004

Explanation: An abend has occurred during an attempt to access the caller-provided *eibptr* 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.

Collect the following diagnostic items:

* 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.
* Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
* All dumps taken by the attachment facility or requesting application.

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.

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.

Collect the following diagnostic items:

* 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.
* Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
* All dumps taken by the attachment facility or requesting application.

00C12007 • 00C12011

00C12007

Explanation: An abend has occurred during an attempt to access the caller-provided startup 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.

Collect the following diagnostic items:
- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- All dumps taken by the attachment facility or requesting application.

00C12008

Explanation: An abend has occurred during an attempt to access the caller-provided correlation 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.

Collect the following diagnostic items:
- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- All dumps taken by the attachment facility or requesting application.

00C12009

Explanation: An abend has occurred during an attempt to access the caller-provided accounting token 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.

Collect the following diagnostic items:
- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- All dumps taken by the attachment facility or requesting application.

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00C12010

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.

Collect the following diagnostic items:
- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- All dumps taken by the attachment facility or requesting application.

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00C12011

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.

Collect the following diagnostic items:

* 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.
* Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
* All dumps taken by the attachment facility or requesting application.

00C12012

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.

Collect the following diagnostic items:

* 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.
* Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
* All dumps taken by the attachment facility or requesting application.

00C12013

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.

Collect the following diagnostic items:

* 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.
* Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

* All dumps taken by the attachment facility or requesting application.

00C12014

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.

Collect the following diagnostic items:

* 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.
* Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
* All dumps taken by the attachment facility or requesting application.

00C12015

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.

Collect the following diagnostic items:

* 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.
* Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
* All dumps taken by the attachment facility or requesting application.

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.

Collect the following diagnostic items:
- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- All dumps taken by the attachment facility or requesting application.

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.

00C12022

Explanation: An abend has occurred during an attempt to access the caller-provided package list parameter while executing in the PSW key of the caller. This error has probably occurred as a 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.

Collect the following diagnostic items:
- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- All dumps taken by the attachment facility or requesting application.

00C12023

Explanation: An abend has occurred during an attempt to access the caller-provided thread token parameter while executing in the PSW key of the caller. This reason code 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.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- All dumps taken by the attachment facility or requesting application.

00C12024

Explanation: While executing in the PSW key of the caller, an abend occurred during an attempt to access the accounting-string parameter that was provided by 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 information that was provided by the caller. When any abend occurs, this register indicates which parameter caused the error.

00C12025

Explanation: While executing in the PSW key of the caller, an abend occurred during an attempt to access the trusted user parameter that was provided by 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 information that was provided by the caller. When any abend occurs, this register indicates which parameter caused the error.

00C12026

Explanation: While executing in the PSW key of the caller, an abend occurred during an attempt to access the trusted password parameter that was provided by the caller. This problem is probably the result of a logic error in the requesting program.

System action: The application abends.

User response: Review the dump to determine the reason for the problem.

Problem determination: If necessary, add a SYSDUMP or SYSABEND DD statement to your execution JCL, and run the job again. Then review the dump to determine the reason for the problem.

00C12027

Explanation: While executing in the PSW key of the caller, an abend occurred during an attempt to access the trusted location name parameter that was provided by the caller. This problem is probably the result of a logic error in the requesting program.

System action: The application abends.

User response: Review the dump to determine the reason for the problem.

Problem determination: If necessary, add a SYSDUMP or SYSABEND DD statement to your execution JCL, and run the job again. Then review the dump to determine the reason for the problem.

00C12028

Explanation: While executing in the PSW key of the caller, an abend occurred during an attempt to access the trusted registry parameter that was provided by the caller. This problem is probably the result of a logic error in the requesting program.

System action: The application abends.

User response: Review the dump to determine the reason for the problem.

Problem determination: If necessary, add a SYSDUMP or SYSABEND DD statement to your execution JCL, and run the job again. Then review the dump to determine the reason for the problem.

00C12029

Explanation: While executing in the PSW key of the caller, an abend occurred during an attempt to access the trusted original authorization ID parameter that was provided by the caller. This problem is probably the result of a logic error in the requesting program.

System action: The application abends.

User response: Review the dump to determine the reason for the problem.

Problem determination: If necessary, add a SYSDUMP or SYSABEND DD statement to your execution JCL, and run the job again. Then review the dump to determine the reason for the problem.

00C12030

Explanation: While executing in the PSW key of the caller, an abend occurred during an attempt to access the trusted security token parameter that was provided by the caller. This problem is probably the result of a logic error in the requesting program.

System action: The application abends.

User response: Review the dump to determine the reason for the problem.

Problem determination: If necessary, add a SYSDUMP or SYSABEND DD statement to your execution JCL, and run the job again. Then review the dump to determine the reason for the problem.

00C12031

Explanation: An abnormal termination has occurred during an attempt to access the caller-provided *ssnma* 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. information.

00C12032

Explanation: An abnormal termination occurred during an attempt to access the caller-provided *activea* 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 resubmit your job.

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.

00C12033

Explanation: An abnormal termination has occurred during an attempt to access the caller-provided *arraysz* 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 resubmit your job.

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.

00C12034

Explanation: An abnormal termination has occurred during an attempt to access the caller-provided *decpptr* 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 resubmit your job.

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.

00C12201

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:

00C12202

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:

00C12203

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:

00C12204

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:

00C12205

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:

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:

00C12207

Explanation: The application program either omitted the function name parameter or passed an unrecognized function parameter to the RRSAF.

User response: Modify or repair your application to pass a valid function request to RRSAF.

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:

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:

00C12211

Explanation: The application program issued a CREATE THREAD function request and specified an invalid package list entry.

User response: You can continue processing with a corrected request.

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:

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:

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:

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:

00C12220

Explanation: The application program issued a CALL DSNRLI with function SET_ID without completing CREATE THREAD processing. SET_ID requests cannot be issued until CREATE THREAD processing is complete.

User response: You can continue processing with a corrected request.

00C12221

Explanation: The application program issued a CALL DSNRLI with function SET_CLIENT_ID without completing CREATE THREAD processing. SET_CLIENT_ID requests cannot be issued until CREATE THREAD processing is complete. SET_CLIENT_ID request are permitted only after a plan is allocated.

User response: You can continue processing with a corrected request.

00C12222

Explanation: The application program issued a CALL DSNRLI statement with the SET_TRUSTED function, but did not complete processing of the CREATE THREAD function. SET_TRUSTED requests cannot be issued until CREATE THREAD processing is complete.

System action: The SET_TRUSTED request is not processed.

User response: Correct the request.

00C12223

Explanation: The application program issued a CALL DSNRLI statement with the SWITCH_USER function, but did not complete processing of the CREATE THREAD function. SWITCH_USER requests are permitted only after a plan is allocated.

System action: The SET_TRUSTED request is not processed.

User response: Correct the request.

00C12230

Explanation: The DB2 RRSAF attachment facility function FIND_DB2_SYSTEMS was invoked with a *ssnma* and *activea* array size that is not large enough to contain the information on all the defined DB2 systems on this LPAR.

System action: The request for information failed with Return Code 4.

User response: Increase the size of the storage allocated for the *ssnma* and *activea* arrays, and change the *arraysz* parameter to indicate the new size.

00C12231

Explanation: The DB2 RRSAF attachment facility failed because the requestor's authorization ID has exceeded the maximum number of concurrent sessions allowed.

System action: The connection request is not processed.

System programmer response: Determine the value of the USER.CSDATA.DSNMUCTL defined for the primary authorization ID in RACF and determine if that value needs to be updated.

Programmer response: Close or end some of the existing connections, and try the request again.

Problem determination: DB2 Version 9.1 for z/OS in a Common Criteria environment (DSN6SPRM COMCRIT= YES) restricts the number of concurrent threads for a primary authorization ID based upon the custom field USER.CSDATA.DSNMUCTL.

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:

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:

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:

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:

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.

00C12832

Explanation: The RRSAF SIGNON processing is performed in a trusted context. The USER *authorization ID* is not defined in this trusted context *context name*.

System action: The RRSAF SIGNON request is not processed.

User response: Contact the system administrator to add the user to the trusted context.

00C12850

Explanation: DB2 stored procedure DSNACICS issues this abend code when the JCL startup procedure for the stored procedure address space in which DSNACICS runs contains a DSNDUMP DD statement. DSNACICS takes an SVC dump when it generates an error message. At the time of the dump:
- Register 2 contains the address of the message that was being generated.
- Register 3 contains the address of the first parameter that was passed to DSNACICS.
- Register 4 contains the address of the XPL parameter area that was passed to DSNACICX.

System action: The stored procedure requests an SVC dump and terminates.

System programmer response: If the dump was requested to diagnose a problem in user exit DSNACICX, use IPCS to examine the contents of the dump. If the dump was requested because of a possible error in the DB2 stored procedure, refer to Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Chapter 4. X'C2......' codes

Reason code identifiers that begin with `00C2` communicate normal and error situations with the buffer manager.

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.

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 *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 the SYSLOG data set for the period of time spanning the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem. Restart DB2.

Problem determination: The unexpected reason code returned by the drain functionin 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:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

System programmer response: Request the SYS1.LOGREC and the SVC dump.

User response: Resubmit the failing application.

Problem determination: Refer to *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
- RLPCCSTA (1 byte): New cached state of the P-lock for this DB2
- RLPRSTAT (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

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 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 may exist. For each one that exists, a DSNT500I message 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 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.

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.

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 *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 the SYSLOG data set for the period of time spanning the failure.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00C202C1

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, DSNB330E or DSNB306I) to determine why DB2 could not connect to the new group buffer pool structure.

Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00C202D2

Explanation: An attempt was made to cold-start a member of a data sharing group, but another member had an active connection to a group buffer pool.

System action: The DB2 subsystem is abnormally terminated.

Operator response: Make sure that all other members of the group have been shut down, and restart the failing member.

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.

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 Part 2 of *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:

GPR	Content
7	Address of the page buffer
8	Address of the page set block (PB)

Collect the following diagnostic items:

- 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.
- IDCAMS LISTCAT output for the ICF (VSAM) catalog that contains the DB2 subsystem catalog that defined the failing index or table.
- VTOC listing of the disk volume on which the failing operation occurred.
- VVDS dump of the volumes that contain the data set.
- DB2 REPAIR dump of the requested page.

- DSN1LOGP detail report that contains log records associated with the damaged page.

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.

System action: The requesting execution unit is abended.

Operator response: Print the SYS1.LOGREC and request the SVC dump.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Rerun the application.

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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

System action: A 'resource not available' code is returned to the user.

User response: Resubmit the failing application.

00C200FF

Explanation: An attempted open of a page set failed because DB2 has reached the MVS limit on concurrent open data sets.

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 item:

- 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.

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.

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 *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 the SYSLOG data set for the period of time spanning the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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 *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 the SYSLOG data set for the period of time spanning the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Output of the GTF trace (if requested by IBM).
- DB2 log output, including any DB2 recovery log archive tapes.

00C200F4

Explanation: DB2 is unable to obtain one of the following locks:

- SYSLGRNG or SYSLGRNXrecording 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

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 in messages.

User response: Resubmit the failing application.

Problem determination:

00C200E8

Explanation: The 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.

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.

System programmer response: Analyze the virtual storage content of the *ssnm*DBM1 address space to determine further action. If appropriate, use the ALTER TABLESPACE or ALTER INDEX statement to indicate use of a different buffer pool. Otherwise, use ALTER BUFFERPOOL commands to balance virtual storage usage for all buffer pools.

00C202C3

Explanation: DB2 received an unexpected return and reason code from the MVS IXLEERSP 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 is issued indicating that the IXLEERSP 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 IXLEERSP reason code.

Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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.

A common reason for this failure is when IRLMRWT is less than RECALLD, and an HSM recall for the migrated dataset exceeds IRLMRWT.

System action: A 'resource not available' code is returned to the user.

User response: Resubmit the failing application.

00C200EF

Explanation: DB2 was unable to open a required data set because the data set does not have the extended addressability attribute.

System action: A "resource not available" code is returned. This reason code and the data set name are recorded in the SQLCA and in message DSNT500I.

System programmer response: Associate the data set with an extended addressability data class.

Related information

➦ DSNT500I (DB2 Messages)

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.

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 Part 2 of *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:
- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00C200F3

Explanation: DB2 is unable to obtain one of the following locks:
- SYSLGRNG or SYSLGRNXrecording 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

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 are available to the user in the SQLCA or in messages.

User response: Resubmit the failing application.

Problem determination:

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.

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 *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 the SYSLOG data set for the period of time spanning the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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 *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 the SYSLOG data set for the period of time spanning the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00C202B3

Explanation: 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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00C200CB

Explanation: The buffer manager (BM) subcomponent of DB2 discovered a damaged ABG or AB control block while attempting to write a checkpoint.

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 Part 2 of *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 the SYSLOG data set for the period of time spanning the failure.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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 SQLCA.

System programmer response: Examine SYS1.LOGREC for a previous error related to IRLM.

Problem determination: Refer to *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
- RLPCCSTA (1 byte): New cached state of the P-lock for this DB2
- RLPRSTAT (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

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 Part 2 of *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- IDCAMS LISTCAT output for the ICF (VSAM) catalog that contains the DB2 subsystem catalog that defined the failing index or table.
- VTOC listing of the disk volume on which the failing operation occurred.

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.

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 Part 2 of *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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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 DSNT500I 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 DSNT500I 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:

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 SYSLGRNXrecording 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.

Operator response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

User response: Notify the system programmer and rerun the application.

Problem determination: Refer to *Diagnosis Guide and Reference* 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.

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 *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 the SYSLOG data set for the period of time spanning the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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00C200E0

Explanation: A table space or index space cannot be accessed because DB2 is unable to create the referenced buffer pool. The referenced 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.

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 *ssnm*DBM1 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.

00C200D8

Explanation: This is a DB2 internal error. The buffer manager (BM) subcomponent of DB2 discovered that some buffer manager resources are inconsistent.

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 *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 the SYSLOG data set for the period of time spanning the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00C200AE

Explanation: This is a DB2 internal error. The caller of the buffer manager (BM) is trying to get a page latch on a page for which there are latch waiters, but no latch holders.

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 *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 the SYSLOG data set for the period of time spanning the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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 in messages.

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.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer. Invoke the application after the system programmer has corrected the error.

Problem determination: Collect the following diagnostic items:

- 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.
- IDCAMS LISTCAT output for the ICF (VSAM) catalog that contains the DB2 subsystem catalog that defined the failing index or table.
- VTOC listing of the disk volume on which the failing operation occurred.

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.

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:

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.

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 *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 the SYSLOG data set for the period of time spanning the failure.
*   Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
*   Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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00C202B5

Explanation: 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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00C200AB

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.

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 *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 the SYSLOG data set for the period of time spanning the failure.
*   Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
*   Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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.

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 *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 the SYSLOG data set for the period of time spanning the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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 *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
- RLPCCSTA (1 byte): New cached state of the P-lock for this DB2
- RLPRSTAT (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

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.

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 *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 the SYSLOG data set for the period of time spanning the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Dump of the index or table space that failed.
- Output of the GTF trace (if requested by IBM).
- DB2 log output, including any DB2 recovery log archive tapes.

00C202B7

Explanation: 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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00C200F0

Explanation: DB2 encountered an error on an IXLCACHE request while trying to write a page to the group buffer pool during physical lock (P-lock) negotiation.

System action: The requesting execution unit abends. The error is recorded to SYS1.LOGREC, but the dump is suppressed and the abend is retried in the functional recovery. Another group member, requesting the P-lock that caused the negotiation on this member, receives a resource not available code of 00C20252, and its P-lock request is denied.

Problem determination: If you suspect an error in DB2, refer to Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00C200BA

Explanation: This reason code is a DB2 internal error. DB2 has encountered an unexpected error while attempting to access a system page of a page set.

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 part 2 of *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 the SYSLOG data set for the period of time spanning the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00C200AD

Explanation: This is a DB2 internal error. The caller of the buffer manager (BM) is trying to get a page latch for a page that belongs to one type of page set (index or data). However, the caller already holds a page latch on another page that belongs to a different type of page set.

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 *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 the SYSLOG data set for the period of time spanning the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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00C200D3

Explanation: A prior abend occurred in a 'must complete' processing window of a buffer manager (BM) function.

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 Part 2 of *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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.

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 Part 2 of *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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

System action: The requesting execution unit is abended.

Operator response: Print the SYS1.LOGREC and request the SVC dump.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Rerun the application.

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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00C202C4

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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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.

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 *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 the SYSLOG data set for the period of time spanning the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

System action: A 'resource not available' code is returned to the user. Abend status is recorded in SYS1.LOGREC.

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.

User response: Notify the system programmer. Invoke the application again after the system programmer has corrected the error.

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:

* 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.
* Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
* IDCAMS LISTCAT output for the ICF (VSAM) catalog that contains the DB2 subsystem catalog that defined the failing index or table.
* VTOC listing of the disk volume on which the failing operation occurred.

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.

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 *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 the SYSLOG data set for the period of time spanning the failure.
* Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
* Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00C202C5

Explanation: During a cold start of a member of a data sharing group, DB2 performed a query for retained locks in order to determine whether a group buffer pool needed to be forced off, but the query failed.

System action: DB2 abends and takes a dump. The DB2 subsystem is abnormally terminated.

Operator response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

Problem determination: Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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 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.

System action: A 'resource not available' code is returned to the user.

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 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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer. Invoke the application after the system programmer has corrected the error.

Problem determination: Collect the following diagnostic items:

* 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.
* IDCAMS LISTCAT output for the ICF (VSAM) catalog that contains the DB2 subsystem catalog that defined the failing index or table.
* VTOC listing of the disk volume on which the failing operation occurred.

00C200EB

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 subsystems to remove the

'resource unavailable' condition.

Problem determination:

00C200CC

Explanation: The buffer manager (BM) subcomponent of DB2 discovered a close task has been waiting for prefetch to complete for two checkpoints.

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 Part 2 of *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 the SYSLOG data set for the period of time spanning the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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 *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 the SYSLOG data set for the period of time spanning the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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).

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00C202A2

Explanation: MVS returned an unexpected error from an IXLDISC 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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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.

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 Part 2 of *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 the SYSLOG data set for the period of time spanning the failure.
- IDCAMS LISTCAT output for the ICF (VSAM) catalog that contains the DB2 subsystem catalog that defined the failing index or table.
- VTOC listing of the disk volume on which the failing operation occurred.

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 which bit is set in "VRARRK30 - Error mask":

X'04' If bit X'04' is set, the number of allocated data elements was not sufficient to hold a single data page. VRARRK31 contains the allocated number of data elements. The number of required data elements depends on the page size of the buffer pool:

Page size	Number of data elements
4KB	1
8KB	2
16KB	4

Page size	Number of data elements
32KB	8

X'10' 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.

X'20' 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.

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.

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 *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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 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 *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
- RLPCCSTA (1 byte): New cached state of the P-lock for this DB2
- RLPRSTAT (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

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.

System programmer response: Request the SYS1.LOGREC and the SVC dump.

User response: Resubmit the failing application.

Problem determination: Refer to *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
- RLPCCSTA (1 byte): New cached state of the P-lock for this DB2

- RLPRSTAT (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

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.

Operator response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

User response: Notify the system programmer and rerun the application.

Problem determination: Refer to *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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 *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 the SYSLOG data set for the period of time spanning the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Dump of the index or table space that failed.
- Output of the GTF trace (if requested by IBM).
- DB2 log output, including any DB2 recovery log archive tapes.

00C202C2

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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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.

System action: A 'resource not available' code is returned to the user.

User response: Resubmit the failing application.

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.

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 *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 the SYSLOG data set for the period of time spanning the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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 *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 the SYSLOG data set for the period of time spanning the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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.

Operator response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

User response: Notify the system programmer and rerun the application.

Problem determination: If you suspect an error in DB2, refer to Part 2 of *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- IDCAMS LISTCAT output for the ICF (VSAM) catalog that contains the DB2 subsystem catalog that defined the failing index or table.
- VTOC listing of the disk volume on which the failing operation occurred.

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).

System action: The BM does not release the page as requested, and the execution unit driving this function terminates 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 *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 the SYSLOG data set for the period of time spanning the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Dump of the index or table space that failed.
- Output of the GTF trace (if requested by IBM).
- DB2 log output, including any DB2 recovery log archive tapes.

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 Part 2 of *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- IDCAMS LISTCAT output for the ICF (VSAM) catalog that contains the DB2 subsystem catalog that defined the failing index or table.
- VTOC listing of the disk volume on which the failing operation occurred.

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 DSNT500I 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 DSNT500I message is sent to the console.

System programmer response: Issue the DFHSM command (HRECALL) to restore the migrated data set.

User response: Notify the system programmer. After the data set is restored, rerun the application program, transaction, or query.

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 piece 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 Part 2 of *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 the SYSLOG data set for the period of time spanning the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- IDCAMS LISTCAT output for the ICF (VSAM) catalog that contains the DB2 subsystem catalog that defined the failing index or table.

- VTOC listing of the disk volume on which the failing operation occurred.

00C200E9

Explanation: A buffer could not be assigned in the buffer pool (indicated in the SQLCA) because all buffers in the 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.

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.

System programmer response: Reduce concurrent activity by reducing the number of DB2 threads, or, if necessary, increase the size of the failing buffer pool by using the ALTER BUFFERPOOL command.

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 *ssnm*DBM1 startup procedure to get more virtual storage.

Problem determination:

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). One or more peer DB2s in the group failed to drain the object because some error occurred. Both the DB2 running the request and the peer DB2 send DB2 message DSNT500I to the console to report the problem.

System action: A 'resource not available' return code, reason code and object name are sent back to the requesting function.

Operator response: Notify the system programmer.

System programmer response: Retrieve the DSNT501I messages from the console and analyze the corresponding reason and error codes.

00C200EA • 00C200B0

Problem determination:

00C200EA

Explanation: DB2 is unable to perform the drain function 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 CLAIMERS 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.

00C202AC

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 *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
- RLPCCSTA (1 byte): New cached state of the P-lock for this DB2
- RLPRSTAT (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

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.

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 Part 2 of *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:

GPR	Content
7	Address of the page buffer
8	Address of the page set block (PB)

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- IDCAMS LISTCAT output for the ICF (VSAM) catalog that contains the DB2 subsystem catalog that defined the failing index or table.
- VTOC listing of the disk volume on which the failing operation occurred.

00C200B8

Explanation: This is a DB2 internal error. DB2 is unable to update the SYSLGRNG or SYSLGRNXpage set. The utility returned an unexpected reason code.

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 *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 the SYSLOG data set for the period of time spanning the failure.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00C202D0

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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00C200D5

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.

System action: DB2 is abended.

Operator response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump. Restart DB2. If you suspect an error in DB2, refer to Part 2 of *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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00C200C9

Explanation: The buffer manager (BM) subcomponent of DB2 discovered a damaged PBG control block while attempting to write a check point log record.

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 Part 2 of *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 the SYSLOG data set for the period of time spanning the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- DB2 log output, including any DB2 recovery log archive tapes.

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.

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:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- IDCAMS LISTCAT output for the ICF (VSAM) catalog that contains the DB2 subsystem catalog that defined the failing index or table.
- VTOC listing of the disk volume on which the failing operation occurred.

00C200D7

Explanation: A prior abend occurred while resuming a suspended execution unit. The status of resume was 'indoubt' at the time of the abend.

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 Part 2 of *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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 *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 the SYSLOG data set for the period of time spanning the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00C202B4

Explanation: 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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00C202D1

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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00C202C0

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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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.
- TOD clock values are out of synch between systems in a Parallel Sysplex®.

System action: The requesting execution unit is abended. If DSNB1SWS issues the ABEND, then it is preceded by a DSNT500I message indicating which page is in error and a DSNI004I 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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The following general purpose registers (GPRs) contain the indicated diagnostic information:

GPR	Content
7	Address of the page buffer
8	Address of the page set block (PB)

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Dump of the index or table space that failed.
- DB2 log output, including any DB2 recovery log archive tapes.

00C202B6

Explanation: 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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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 *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.

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 Part 2 of *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 the SYSLOG data set for the period of time spanning the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- IDCAMS LISTCAT output for the ICF (VSAM) catalog that contains the DB2 subsystem catalog that defined the failing index or table.
- VTOC listing of the disk volume on which the failing operation occurred.

00C202B2

Explanation: 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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00C202AA

Explanation: An error occurred in IRLM on a physical lock (P-lock) or change request from DB2. This 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 *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
- RLPCCSTA (1 byte): New cached state of the P-lock for this DB2
- RLPRSTAT (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

00C200F1

Explanation: The buffer manager (BM) subcomponent of DB2 is unable to unallocate a DB2 data set. An error was returned by the dynamic unallocation 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 made available to the user 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 Part 2 of *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- IDCAMS LISTCAT output for the ICF (VSAM) catalog that contains the DB2 subsystem catalog that defined the failing index or table.

- VTOC listing of the disk volume on which the failing operation occurred.

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 permanent I/O error was detected by the media manager during preformat processing. 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.

System action: A 'resource not available' code is returned to the user.

System programmer response: Recover the entire data set with the recovery utility, and notify the user to invoke the application again. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer. Invoke the application after the system programmer has corrected the error.

Problem determination: Collect the following diagnostic items:

- 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.
- IDCAMS LISTCAT output for the ICF (VSAM) catalog that contains the DB2 subsystem catalog that defined the failing index or table.
- VTOC listing of the disk volume on which the failing operation occurred.

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.

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.

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 Part 2 of *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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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.

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

00C2006A • 00C20103

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.

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.

System action: A "resource not available" code is returned to the user.

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.

User response: Notify the system programmer.

Problem determination: Collect the following diagnostic items:

- 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.

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.

System action: A "resource not available" code is returned to the user.

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.

User response: Notify the system programmer.

Problem determination: Collect the following diagnostic items:

- 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.

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.

System action: A "resource not available" code is returned to the user.

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.

User response: Notify the system programmer.

Problem determination: Collect the following diagnostic items:

- 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.

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.

System action: A "resource not available" code is returned to the user.

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.

User response: Notify the system programmer.

Problem determination: Collect the following diagnostic items:

- 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.

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.

System action: A "resource not available" code is returned to the user.

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.

User response: Notify the system programmer.

Problem determination: Collect the following diagnostic items:

- 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.

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.

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:

- 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.

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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.

System action: A "resource not available" code is returned to the user.

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.

User response: Notify the system programmer.

Problem determination: Collect the following diagnostic items:

* 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.

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.

System action: A "resource not available" code is returned to the user.

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.

User response: Notify the system programmer.

Problem determination: Collect the following diagnostic items:

* 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.

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.

System action: A "resource not available" code is returned to the user.

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 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.

User response: Notify the system programmer.

Problem determination: Collect the following diagnostic items:

* 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.

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.

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.

User response: Notify the system programmer.

Problem determination: Collect the following diagnostic items:

* 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.

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.

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.

User response: Notify the system programmer.

Problem determination: Collect the following diagnostic items:

* 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.

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 DSNB200Iis 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.

System action: A 'resource not available' code is returned to the user. A DSNB200Imessage is issued to the console. DB2 continues to close the data set.

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.

User response: Contact the system programmer. Restart or rerun the RECOVER, LOAD, or REORG job after the system programmer corrects the error.

Problem determination: Collect the following diagnostic items:

- 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.
- IDCAMS LISTCAT output for the ICF (VSAM) catalog that contains the DB2 subsystem catalog that defined the failing index or table.
- IDCAMS LISTCAT output that shows the attributes of all active log data sets for the DB2 member that failed.

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:

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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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: Contact the system programmer to determine why the resource is unavailable. Print the SYS1.LOGREC and the SVC dump.

00C20110

Explanation: DB2 cannot access a table space, index, or partition because the highest formatted page (as recorded by DB2 in the header page) is higher than that derived from the VSAM high-used RBA.

The reason code and the data set name for this error are available in the SQLCA or in messages.

System action: DB2 returns a 'resource unavailable' code to the user.

System programmer response: To enable access to the object, take one of the following actions:

- Restore the object to a consistent state with the RECOVER or REBUILD utility, DSN1COPY, or some other means.
- Replace the data using the LOAD REPLACE utility.
- Allow access to the data in its current state. Use the REPAIR LEVELID utility to reset the high-used page number in the header page to be consistent with the VSAM high-used RBA. This may result in inconsistent data.

Problem determination: Determine the high-formatted page number in the header page by running DSN1PRNT with the FORMAT option, and checking the value of HPGHPREF.

You can also determine the VSAM high-used RBA by running an IDCAMS LISTCAT on the dataset.

00C20111

Explanation: DB2 attempted to access a striped data set with a page size of 8 KB, 16 KB, or 32 KB. The data set is defined with a 4 KB control interval (CI) size. DB2 does not allow this because partial writes cannot always be detected.

System action: SQLCODE -904 is returned. The SQLCA contains a resource-not-available reason code and the data set name.

System programmer response: Ensure that the data set is defined with a control interval size that matches its page size.

User response: Convert the control interval size of the associated table space from 4 KB to a control interval size that matches the page size. The REORG TABLESPACE, LOAD REPLACE, or RECOVER utility can be used to convert the control interval size for the table space.

Problem determination: Run access method services LISTCAT to determine the data set attributes.

00C20112

Explanation: An attempt was made to access a DB2 data set which was defined with incompatible Control Interval (CI) size. A compatible CI size is either 4K or the page size.

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.

System programmer response: Ensure that the data set is defined with the compatible CI size.

User response: Convert the data set attribute 'control interval size' of the associated table space from 4K CI into the one matching the page size. DB2 Utilities REORG table space, LOAD with REPLACE, and RECOVER can be used to convert the table space.

Problem determination: Obtain an access method services LISTCAT for the named data set's attributes.

00C20113

Explanation: DB2 has reached the DB2 limit for concurrent open data sets. OPEN fails when both of the following conditions are true:

- The number of concurrent open datasets exceed the DB2 installation parameter DSMAX.
- The number of concurrent open datasets exceed the DB2 installation parameter 32,768 open datasets.

If running in z/OS Version 1 Release 6 and earlier, no more than 65,041 open datasets are allowed.

System action: SQLCODE -904 is returned to the user and the requested open is not performed. This reason code and the dataset name are recorded in the SQLCA. An SVC dump and SYS1.LOGREC recording are not requested.

Operator response: Notify the system programmer.

System programmer response: Take one of the following actions:

- Reduce the number of datasets that must be kept open by DB2 by limiting the amount of concurrent activity.
- Increase DSMAX, subject to the 65,041 open dataset limit in z/OS Version 1 Release 6 and earlier.

00C20120

Explanation: This abend reason code is issued because of an unexpected return code from IWM4MREG, IWM4MDRG, or IWM4MCHS.

System action: A dump is requested, then DB2 retries the abend and processing continues.

00C20200

Explanation: DB2 was unable to open a required index data set because the index was formatted incorrectly. For example, it may have been formatted as a Type 1 index when the DB2 catalog indicates that it should be Type 2.

The reason code and index data set name are made available in the SQL communication area or in related messages.

System action: A 'resource unavailable' code is returned to the user.

Operator response: Notify the system programmer.

System programmer response: Use the RECOVER utility to restore the index to a consistent state.

Problem determination:

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.

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.

User response: Contact the system programmer.

Problem determination:

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, tell the MVS system administrator to alleviate the storage constraint problem by making additional storage available to the involved coupling facility, or by changing the active MVS CFRM 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.

00C20205

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.

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 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.

User response: Contact the system programmer.

00C20206

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.

System programmer response: For those page sets in the LPL, use the RECOVER utility or the -START DATABASE command.

User response: Contact the system programmer.

Problem determination:

00C20207

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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00C20208

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.

System programmer response: Refer to message DSNB306I.

User response: Contact the system programmer.

Problem determination: Collect the following diagnostic items:

- 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.

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.

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 NORCVRPEND
- LOAD REPLACE
- START DATABASE with ACCESS FORCE (Not recommended. Specifying this option can result in inconsistent data.)

User response: Contact the system programmer to determine when the resource will be available for use.

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.

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 satisfactorally, you can use the MVS command SETXCF,STOP,REBUILD to stop the rebuild.

User response: Resubmit the request.

00C20220

Explanation: While DB2 was accessing a group buffer pool, MVS detected an environmental error during an IXLCACHE request from DB2.

System action: The requesting execution unit abends.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00C20221

Explanation: While accessing a group buffer pool, DB2 received an unexpected error from MVS, which detected an invalid parameter on an IXLCACHE 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: 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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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 desired. If DUPLEX(ENABLED) is specified in the active CFRM policy for the group buffer pool, then the system attempts to automatically reestablish duplexing for the structure.

Problem determination: See *MVS/ESA Programming: Sysplex Services Reference* for an explanation of the MVS IXLREBLD reason code.

Refer to Section 3 of *Diagnosis Guide and Reference* for more information on identifying and reporting the problem.

00C20230

Explanation: DB2 could not establish duplexing for a group buffer pool because a coupling facility with CFLEVEL = 5 functionality was not available in which to allocate the secondary group buffer pool.

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 PREFLIST 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 PREFLIST 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 the secondary group buffer pool is 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.

00C20250

Explanation: A conditional pageset P-lock request failed.

User response: Contact IBM Software Support.

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:

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:

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 DATABASE command to display the DB2 member

names owning the retained locks. You must restart those subsystems to remove the 'resource unavailable' condition. To show the status of the DBMS and IRLM subsystems, you can use the following command:

`F irlmproc,STATUS,ALLD`

00C20255

Explanation: DB2 is unable to obtain a physical lock (P-lock) because another member holding the lock has not responded to the P-lock request. 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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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. If lock size is not already at the current POLICY maximum size, you can increase lock size with the `SETXCF START, ALTER, STRNAME=lock_structure, SIZE=new_size` command.

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:

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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00C20260

Explanation: This is a DB2 internal error. Castout was unsuccessful because DB2 lost connectivity to the group buffer pool.

System action: A 'resource not available' code is returned to the user.

System programmer response: Establish this DB2's connectivity to the group buffer pool before allowing operations that reference this group buffer pool.

User response: Notify the system programmer.

Problem determination: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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.

System programmer response: Establish this DB2's connectivity to the group buffer pool before allowing operations that reference this group buffer pool.

User response: Notify the system programmer.

Problem determination: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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.

System programmer response: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination:

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.

System programmer response: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination:

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:

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.

System programmer response: Refer to the 'System Programmer Response' in message DSNB350 or DSNB351.

User response: Issue a START DB command to explicitly recover the page set from GRECP/LPL status.

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.

System programmer response: Refer to the 'System Programmer Response' in message DSNB350 or DSNB351.

User response: Issue a START DB command to explicitly recover the page set from GRECP/LPL status.

00C20269

Explanation: An application or utility is attempting to access DB2 data, but this is not allowed because DB2 was started in System Recover Pending mode. When DB2 is started in System Recover Pending mode, nothing other than the Restore System utility is allowed to access DB2 data.

System action: The application fails with a "resource unavailable" condition.

System programmer response: The application cannot be run while DB2 is in System Recover Pending mode.

00C2026A

Explanation: DB2 is unable to obtain a physical lock (P-lock), because another member holding the lock has been in DB2 shutdown mode for an extended amount of time.

System action: SQLCODE -904 (resource not available) is returned to the user. This reason code, as well as the resource name, are returned in the cursor table (CT) and made available to the user in the SQLCA.

Problem determination: Check the other members of the data sharing group to find the one which is stalled in shutdown. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem. Resubmit the failing application after the member has come down.

00C2026B

Explanation: DB2 is unable to obtain a physical lock (P-lock), because another member holding the lock has had logging suspended for an extended amount of time. The logging has been suspended because the active logs are full, or because there is an outstanding SET LOG SUSPEND command.

System action: SQLCODE -904 (resource not available) is returned to the user. This reason code, as well as the

resource name, are returned in the cursor table (CT) and made available to the user in the SQLCA.

Problem determination: Check the other members of the data sharing group to find the one that has logging suspended. Then take the appropriate action by either issuing the SET LOG RESUME command or freeing up the active log data sets. Resubmit the failing application after the logging situation is resolved.

00C2026C

Explanation: DB2 is unable to obtain a physical lock (P-lock), because another member holding the lock has encountered an abend in its P-lock exit.

System action: SQLCODE -904 (resource not available) is returned to the user. This reason code, as well as 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, or an SVC dump.

Problem determination: Collect the SYS1.LOGREC and SVC dump, if available, from the other DB2. If the problem persists, it might be necessary to recycle this member to resolve the P-lock failure.

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.

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 *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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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

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 *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

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 *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.

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 *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.

System action: The requesting execution unit is abended.

Operator response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

00C20306 • 00C20307

System programmer response: Refer to *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 SYS1.LOGREC, and request an SVC dump.

Problem determination: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00C20307

Explanation: This is a DB2 internal error.

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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Chapter 5. X'C5......' codes

Reason code identifiers that begin with `00C5` communicate normal and error situations with the TSO attachment facility.

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 Part 2 of *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.

System programmer response: The standard SPUFI documentation should be collected. Refer to Chapter 5, "X'C5......' codes" for information about obtaining dumps and displaying message IDs.

User response: If the problem persists, notify the system programmer.

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:
- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- Listing of the ISPF log for the session involved in the problem.

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.

System programmer response: The standard SPUFI documentation should be collected. Refer to Chapter 5, "X'C5......' codes" for information about obtaining

dumps and displaying message IDs.

User response: If the problem persists, notify the system programmer.

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:
- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- Listing of the ISPF log for the session involved in the problem.

00C50003

Explanation: This could be either a user or a system error. SPUFI was unable to obtain the required storage via GETMAIN.

System action: SPUFI task abends. User returns to ISPF main menu.

System programmer response: If the problem persists, the standard SPUFI documentation should be collected. Refer to Chapter 5, "X'C5......' codes" for information about obtaining dumps and displaying message IDs.

User response: If the problem persists, notify the system programmer. You may have to specify a larger machine size at logon time.

Problem determination: Register 2 contains the amount of storage that was requested. Message

00C50005 • 00C50009

DSNE392E, in the ISPF log data set, gives the name of the module that issued this abend.

Collect the following diagnostic items:
- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- Listing of the ISPF log for the session involved in the problem.

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.

System action: The contents of the field are written to the ISPF log.

System programmer response: The standard SPUFI documentation should be collected. Refer to Chapter 5, "X'C5......' codes," on page 251 for information about obtaining dumps and displaying message IDs.

User response: If the problem persists, notify the system programmer.

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:
- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- Listing of the ISPF log for the session involved in the problem.

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.

System action: The contents of the field are written to the ISPF log.

System programmer response: The standard SPUFI documentation should be collected. Refer to Chapter 5, "X'C5......' codes," on page 251 for information about obtaining dumps and displaying message IDs.

User response: If the problem persists, notify the system programmer.

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:
- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- Listing of the ISPF log for the session involved in the problem.

00C50008

Explanation: This could be either a user or a system error. The DYNALLOC SVC returned an unexpected return code when attempting to deallocate a data set.

System action: The contents of the field are written to the ISPF log

System programmer response: The standard SPUFI documentation should be collected. Refer to Chapter 5, "X'C5......' codes," on page 251 for information about obtaining dumps and displaying message IDs.

User response: If the problem persists, notify the system programmer.

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:
- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- Listing of the ISPF log for the session involved in the problem.

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.

System action: The contents of the field have been written to the ISPF log.

System programmer response: The standard SPUFI documentation should be collected. Refer to Chapter 5, "X'C5......' codes," on page 251 for information about obtaining dumps and displaying message IDs.

User response: If the problem persists, notify the system programmer.

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:
- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- Listing of the ISPF log for the session involved in the problem.

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.

System programmer response: The standard documentation should be collected, including a DSN trace stream. Refer to Chapter 5, "X'C5......' codes," on page 251 for information about obtaining dumps and displaying message IDs.

User response: If the problem persists, notify the system programmer.

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:
- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- Listing of the DSNTRACE data set for the DSN (TSO attachment facility) session involved in the problem.

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.

System action: A X'04E' abend results, and a dump is requested.

System programmer response: The standard documentation may be needed. Refer to Chapter 5, "X'C5......' codes," on page 251 for information about obtaining dumps and displaying message IDs.

Problem determination: Collect the following diagnostic items:
- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- Listing of the DSNTRACE data set for the DSN (TSO attachment facility) session involved in the problem.

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.

System action: Immediately after writing this message, DSN abends with an abend code of X'04E' and an abend reason code of '00C50102'.

System programmer response: See the Problem Determination section of this message.

User response: If the problem persists, notify the system programmer.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:
- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- Listing of the DSNTRACE data set for the DSN (TSO attachment facility) session involved in the problem.

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.

System action: Immediately after writing this message, DSN abends with an abend code of X'04E' and an abend reason code of '00C50103'.

System programmer response: See the Problem Determination section of this message.

User response: If the problem persists, notify the system programmer.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:
- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- Listing of the DSNTRACE data set for the DSN (TSO attachment facility) session involved in the problem.

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.

System action: Immediately after writing this message, DSN abends with an abend code of X'04E' and an abend reason code of '00C50104'.

System programmer response: See the Problem Determination section of this message.

User response: If the problem persists, notify the system programmer.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- Listing of the DSNTRACE data set for the DSN (TSO attachment facility) session involved in the problem.

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.

System action: Immediately after writing this message, DSN abends with an abend code of X'04E' and an abend reason code of '00C50108'.

System programmer response: See the Problem Determination section of this message.

User response: If the problem persists, notify the system programmer.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- Listing of the DSNTRACE data set for the DSN (TSO attachment facility) session involved in the problem.

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.

System action: Immediately after writing this message, DSN abends with an abend code of X'04E' and an abend reason code of '00C50109'.

System programmer response: See the Problem Determination section of this message.

User response: If the problem persists, notify the system programmer.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- Listing of the DSNTRACE data set for the DSN (TSO attachment facility) session involved in the problem.

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.

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.

Severity: 4

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.

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.

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.

User response: Rerun your application under the DSN command processor.

Chapter 6. X'C6......' codes

Reason code identifiers that begin with `00C6` communicate normal and error situations with the message generator.

00C60001

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.

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.

Chapter 7. X'C8......' codes

Reason code identifiers that begin with 00C8 communicate normal and error situations with the DB2 precompiler or the DB2 coprocessor.

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.

A   Language Environment required, but not available.

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.

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.

Chapter 8. X'C9......' codes

Reason code identifiers that begin with `00C9` communicate normal and error situations with the data manager.

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.

Operator response: Determine whether the RECOVER utility or START DATABASE command should be run to complete recovery of the object.

User response: Run the RECOVER utility, LOAD utility or START DATABASE command to recover 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 Part 1, "SQL codes," on page 1. Refer to message DSNT500I in *Messages* for an explanation of resource type and resource name.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00C900C6

Explanation: DB2 detected an uncommitted read or write claim on an index being altered in the same commit scope. When you use the PIECESIZE or COPY clause with the ALTER INDEX statement, then you need to have the read or write claim committed BEFORE you complete the operation.

PIECESIZE does not allow an uncommitted write or read claim on the index.

COPY, set to YES or NO, does not allow an uncommitted write on the index.

Commit or rollback all changes to the index before using ALTER INDEX with one of these clauses.

System action: The ALTER INDEX statement is not allowed.

System programmer response: The requested operation is not performed and SQLCODE -904 is issued. For more information, refer to the SQLCODE in "Section 2. SQL Return Codes". Commit or rollback

changes to the index and retry the ALTER INDEX statement.

Problem determination: The requested operation is not performed and SQLCODE -904 is issued. For more information, refer to the SQL return code in "Section 2. SQL Return Codes."

00C900C0

Explanation: A request for an internal lock could not be granted. The request waited for a longer period than is allowed.

System action: The request action is not performed. A 'resource not available' reason code is returned to the caller.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: If the user is a DB2 utility, rerun or restart the utility. If it is a DB2 command, reissue the command. DB2 applications should either commit or roll back to the previous commit, then retry from the commit point.

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 SQLCODE -904, and may also issue message DSNT500I or DSNT501I. For more information, refer to SQL Return Codes in Part 1, "SQL codes," on page 1. You can also refer to the description of the DSNT500I and DSNT501I messages in *Messages*.

Collect the following terms listed in

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Definitions of table spaces, tables, and indexes involved in the error.

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, MERGE 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.

00C900D2

Explanation: The amount of space allowed for processing LOB values by a subsystem has been exceeded. The amount of space allowed for each subsystem is indicated by panel DSNTIPD.

System action: The operation is not allowed. DB2 returns "resource not available" to its invoker.

System programmer response: If possible, increase the value of subsystem parameter LOBVALS.

Problem determination: The requested operation is not performed. An SQLCODE -904 is issued. Message DSNT500I or message DSNT501I might also be issued.

Collect the following diagnostic items:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

Related reference

➡ Sizes panel 1: DSNTIPD (DB2 Installation Guide)

Related information

➡ DSNT500I (DB2 Messages)

➡ DSNT501I (DB2 Messages)

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.

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 *Messages*. 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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- DB2 log output, including any DB2 recovery log archive tapes.

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 DSNTIPD.

System action: The operation is not allowed. DB2 returns "resource not available" to its invoker.

System programmer response: If possible, increase the value of subsystem parameter LOBVALA.

Problem determination: The requested operation is not performed. An SQLCODE -904 is issued. Message DSNT500I or message DSNT501I might also be issued.

Collect the following diagnostic items:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

Related reference

➡ Sizes panel 1: DSNTIPD (DB2 Installation Guide)

Related information

"-904" on page 137

➡ DSNT500I (DB2 Messages)

➡ DSNT501I (DB2 Messages)

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, UPDATE, or MERGE. DB2 issues SQLCODE -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 START DATABASE command to perform LPL/GRECP recovery. If you attempt a START DATABASE command on a tracker DB2, DB2 will issue message DSNI005I with this reason code.

00C900AA

Explanation: The table space or index space could not be stopped because it is indoubt.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.

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00C900D7

Explanation: A logical page list (LPL) or group buffer pool recovery pending (GRECP) recovery was attempted on a LOB table space which was created as LOG NO.

System action: The operation is not allowed.

Programmer response: If you suspect an error in DB2, refer to Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The requested operation is not performed. Message DSNI005I is issued. For more information, refer to the description of the DSNI005I message in *Messages*.

00C900BC • 00C900D3

00C900BC

Explanation: The statement depleted the record identifier (RID) storage available.

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 Part 2 of *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.

00C900CF

Explanation: DB2 was unable to open the specified object because it is one of the following types:

1. A Type 1 index
2. An index with a data set password
3. A table space with a data set password
4. An ROSHARE database

The reason code and object name are in the SQL communication area or in related messages.

System action: Use of the object is not allowed.

User response: Use the ALTER INDEX, ALTER TABLESPACE, or ALTER DATABASE command to put the object into a supported state. DROP can also be used if the object is no longer needed.

Problem determination: The requested operation is not performed. A resource unavailable code is returned to the user.

00C900B2

Explanation: Access to the index is not allowed if the index is defined with the DESC attribute on a VARBINARY column or a column with a distinct type that is based on a VARBINARY data type. Drop the index or alter the column data type to a compatible data type such as CHAR FOR BIT DATA, VARCHAR FOR BIT DATA or BINARY, and then rebuild the index.

System action: The operation is not allowed.

User response: Drop the index or alter the column data type, and then rebuild the index.

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.

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:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- DB2 log output, including any DB2 recovery log archive tapes.

00C900D3

Explanation: No more space in the data space is available for processing LOB values.

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 Part 2 of *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 Part 1, "SQL codes," on page 1. You can also refer to the description of the DSNT500I and DSNT501I messages in *Messages*.

Collect the following diagnostic items:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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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.

System action: The requested action is not performed. The Data Manager function that detected this condition returns 'resource not available' to its caller.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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.

Problem determination: Collect the following diagnostic items:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- Definitions of views and tables involved in the error.

00C900C4

Explanation: An attempt was made to insert values into a table that has a ROWID column with the *generated by default* attribute but no index exists to enforce its uniqueness.

System action: The use of the table is not allowed.

System programmer response: Create a unique single column index for the ROWID column.

Problem determination: The requested operation is not performed. An SQLCODE -904 is issued. For more information, refer to SQLCODE -904 in SQL Return Codes, Part 1, "SQL codes," on page 1. You can also

refer to the description of the DSNT501I message in *Messages*.

00C900AD

Explanation: An attempt was made to access a resource that is in the REORG pending state.

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 can be used to resolve the REORG pending state:

- REORG SHRLEVER(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. SQLCODE -904 is issued.

00C900A6

Explanation: This message is issued if:

- 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.
- You issued CATMAINT UPDATE SCHEMA, CATMAINT UPDATE VCAT, or CATMAINT UPDATE OWNER and they terminated prematurely in previous attempts.

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 Part 2 of *Installation Guide* for information about this job.

If you issued CATMAINT UPDATE SCHEMA, CATMAINT UPDATE VCAT or CATMAINT UPDATE OWNER, and they terminated prematurely, then resubmit these commands in order to complete any remaining updates to the catalog.

Problem determination: The requested operation is not performed. SQLCODE -904 and message DSNT501I are issued. For more information, refer to SQLCODE -904 in SQL Return Codes, Part 1, "SQL codes," on page 1. You can also refer to the description of the DSNT501I message in *Messages*.

00C900AE

Explanation: An attempt was made to allocate or access an index that is in the rebuild pending status.

System action: The use of the object is not allowed.

Operator response: Determine whether the REBUILD utility should be run to complete recovering the object.

User response: Determine when the resource is available for use and rerun the job.

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 DSNI005I is issued. For more information, refer to the SQL return code in *Codes*, or to the description of the DSNT501I message in *Messages*.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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00C900CD

Explanation: DB2 does not accept the NOBACKOUT request during the rollback of a non-global transaction. At least one of the objects of the transaction is shared by another transaction.

System action: DB2 rejects the NOBACKOUT request.

Problem determination: DB2 does not perform the requested operation because at least one object involved in the operation is also updated by other active transactions in DB2. Wait for the other transactions to finish, then reissue the request.

00C900BE

Explanation: DB2 is unable to acquire a lock on a resource because a 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. After a successful restart of a DB2 member, retained locks can continue to exist for that member until all postponed abort threads have been processed.

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.

00C900DA

Explanation: The number of concurrently held application LOB locators and held cursors exceeded the maximum limit (65535).

System action: The operation fails. DB2 generates a dump.

Problem determination: Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.

00C900CB

Explanation: Resource is unavailable because the resource is in a refresh pending state.

System action: The use of the resource is not allowed.

Problem determination: DB2 does not perform the requested operation because the table space or index space might be in an inconsistent state. DB2 issues SQLCODE -904. For more information, refer to the SQL return code, or to the description of the DSNT501I message.

00C900C5

Explanation: An attempt was made to access a table space that is in the auxiliary check pending state (ACHKP).

System action: The operation is not allowed. DB2 returns 'resource not available' to its invoker.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

An SQLCODE -904 is issued. Message DSNT500I or message DSNT501I may also be issued. For more information, refer to the SQL return code in *Codes*, or to the description of messages DSNT500I and DSNT501I in *Messages*.

Collect the following diagnostic items:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00C906FF

Explanation: A specific table version record was not retrieved from the system page because the header page was not available. This situation typically happens because of lock contention in a high concurrency environment.

System action: SQLCODE -904 is issued and processing stops.

Operator response: Notify the system programmer.

System programmer response: Lock contention usually resolves itself. Resubmit the job. If the problem persists, refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Related information

"-904" on page 137

00C900A9

Explanation: An attempt was made to allocate a resource that is deferred.

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, REBUILD INDEX, or LOAD REPLACE utility.

Problem determination: The requested operation is not performed. An SQLCODE -904 is issued. You might also receive message DSNT500I or DSNT501I. For more information, refer to the SQL return code or to the description of the DSNT500I or 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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.

- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- DB2 log output, including any DB2 recovery log archive tapes.

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).

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 part 6 of for more details about these options.

00C900AB

Explanation: An attempt was made to access 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) to determine the status of the resource.

Use the RECOVER POSTPONED command if recover 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.

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.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Message DSNI013I 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:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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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 action: The requested action is not performed.

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 indicated release of DB2, or use an alternate setting for the indicated system parameter.

User response: Inform the system administrator.

00C900C1

Explanation: An attempt was made to allocate an index that has one or more logical partitions in a rebuild pending state.

System action: Use of the object is not allowed.

Operator response: Determine when the REBUILD utility should be run to complete recovering the object. Only the logical partitions marked as rebuild pending need to be recovered.

User response: Determine when the resource is available for use and rerun the job.

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 Part 1, "SQL codes," on page 1, or to the description of the DSNT501I.

If you suspect an error in DB2, refer to Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- Copy of the log for this period, so that additional DSN1LOGP reports can be produced for problem determination.

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00C900A0

Explanation: An attempt was made to allocate or access a table space or index that is in the recover pending status (RECP).

System action: The use of the object is not allowed.

Operator response: Determine whether the RECOVER utility should be run to complete recovering the object.

User response: Determine when the resource is available for use and rerun the job.

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 Part 1, "SQL codes," on page 1. Refer to message DSNT500I in *Messages* for an explanation of resource type and resource name.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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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.

System action: A 'resource not available' code is returned to the end user and the requested action is not performed.

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.

User response: Notify the system programmer to reclaim some free space in the associated segmented table space and rerun the job.

Problem determination: For more information, refer to the explanation of message DSNT501I in *Messages*.

Collect the following diagnostic items:

- 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.
- Definitions of table spaces, tables, and indexes 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.

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, Part 1, "SQL codes," on page 1. You can also refer to the description of the DSNT501I message in *Messages*.

Collect the following diagnostic items:

- 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.
- 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.
- IDCAMS LISTCAT output for the ICF (VSAM) catalog that contains the DB2 subsystem catalog that defined the failing index or table.

Collect definitions of the temporary file(s) involved in the error.

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.

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.

Refer to Part 2 of *Administration Guide* for more information.

Problem determination: The requested operation is not performed. An SQLCODE -904 or -923 is issued. For more information, refer to the SQL return code in *Codes*, or to the description of the DSNT501I message in *Messages*.

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 Part 2 of *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 SQL return code in *Codes*, or to the description of messages DSNT500I and DSNT501I in *Messages*.

Collect the following diagnostic items:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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00C900CE

Explanation: Resource is unavailable because the resource is in a state that is incompatible with this version of DB2.

System action: DB2 does not allow the use of the resource.

Problem determination: DB2 does not perform the requested operation because the table space or index space might be in an inconsistent state. DB2 issues SQLCODE -904. For more information, refer to the SQL return code or to the description of the DSNT501I message.

00C900AF

Explanation: An attempt was made to decompress a compressed index page when moving the page to the bufferpool. The compressed index page was in an inconsistent state.

System action: The decompression that was requested is not performed.

Operator response: Notify the system programmer.

System programmer response: Recover the index page listed in the DSNT408I message and rerun the job. If the job is still unsuccessful, then recover the entire index and rerun the job. If the job is still unsuccessful, then rebuild the index.

Problem determination: The requested operation is not performed because the index page is in an inconsistent state. An SQLCODE -904 is issued and message DSNT408I is issued. For more information, refer to the SQL return code in SQL return codes, or to the description of the DSNT408I message in DB2 Messages.

If you suspect an error in DB2, refer to Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.

00C900CC

Explanation: DB2 does not accept the NOBACKOUT request during the rollback of a non-global transaction while the backout of catalog changes is in progress.

System action: DB2 rejects the NOBACKOUT request.

Problem determination: DB2 does not perform the requested operation because the backout in progress must be complete before the NOBACKOUT request can succeed. Wait for the backout to complete, then reissue the request.

00C9000A

Explanation: A resource was unavailable while attempting to read the log on a READS request for IFCID 0306.

User response: Reissue the request. If the problem persists, refer to Section 3 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination:

00C90026

Explanation: This message is used internally to pass back the condition to RDS and Utilities. This message is an internal reason code. No response is necessary.

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.

User response: Increase the size of the return area.

Problem determination: The system returns the size of the return area that is required in field IFCABSRQ of the IFCA 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. For example, if you receive 00C90064, it means that the decompression dictionary changed since the log record was written.

Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00C90064

Explanation: The decompression dictionary changed since the log record was written. The log record is returned with compressed data.

System action: The requested operation (decompression) is 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: This code is used internally between components. Look for prior abends and messages on the console to determine the cause of the problem.

System programmer response: Locate the cause of the problem using the system dump, the LOGREC dataset, the console log, or the job output. If you cannot determine the cause of the problem using these resources, contact an IBM service representative.

User response: You need to save one or more of the following items so that you can determine the location of the problem:
- The system dump
- The LOGREC dataset
- The console log
- The job output

If you cannot determine the cause of the problem by using these resources, consult the system programmer.

00C90070

Explanation: The Fast Log Apply (FLA) function detected an internal error within DB2. This error might indicate inconsistent data or an error in internal DB2 control structures or code. Possible causes of this error include:
- The fast log apply child task was interrupted by an unexpected error condition.
- An internal abend occurred in the Data Manager component.
- The job or thread was canceled.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested.

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: Locate the cause of the problem using the system dump, the LOGREC dataset, the console log, DB2 logs, or the job output.

User response: Save one or more of the following items in order to determine the location of the problem:
- system dump
- LOGREC dataset
- console log
- job output
- DB2 logs covering the log apply range
- DSN1PRNT of the page in question, if determined or all pages of the object being recovered

00C9007D

Explanation: The compression dictionary for the table space or partition cannot be stored in the table space or partition. Therefore, the LOAD or REORG utility cannot complete successfully.

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 resubmit the LOAD or REORG job. If you suspect an error in DB2, refer to Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00C9007E

Explanation: The compression dictionary for the table space or partition was not successfully retrieved. Therefore, the data request failed.

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 Part 2 of *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.

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.

System action: The allocation process is not allowed.

Operator response: If this reason code appears in message DSNT501I, determine whether the named resource should be started for read-only access.

User response: Determine when the resource is started for read/write access, 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 *Codes*, or to the description of the DSNT501I message in *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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:
- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.

00C90081

Explanation: An attempt was made to allocate a resource that is stopped for all access.

System action: The allocation process is not allowed.

Operator response: If this reason code appears in message DSNT500I or DSNT501I, determine whether the resource should be stopped.

If the resource should not be stopped, then use the -START DB *db-name* SPACENAM *space-name* command to start the object for R/W access.

User response: Determine when the resource is no longer stopped, and rerun the job or resubmit the command.

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 *Codes*, or to the description of messages
DSNT500I and DSNT501I in *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 Part 2 of
Diagnosis Guide and Reference for information on
identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- SVC dump (or system dump), taken to
  SYS1.DUMPxx data set, as result of an
  operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by
  executing IFCEREP1.
- 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.

00C90082

Explanation: An attempt was made to allocate a
resource that is already allocated to a DB2 utility
function.

System action: The allocation process is not allowed.

User response: Determine when the resource is
available and rerun the job.

Problem determination: The requested operation is
not performed. An SQLCODE -904 or -923 is issued,
and/or message DSNT501I 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 *Codes*, or to the description of the
DSNT501I message in *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 Part 2 of
Diagnosis Guide and Reference for information on
identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- SVC dump (or system dump), taken to
  SYS1.DUMPxx data set, as result of an
  operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by
  executing IFCEREP1.
- 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.
- Copy of the log for this period, so that additional
  DSN1LOGP reports can be produced for problem
  determination.

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.

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 DSNT501I 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. The
-DISPLAY DATABASE command shows which
restrictive states DB2 assigned to the resource in
question. Utilities set a restrictive state (for example,
UTRO) on the resource that they are processing, and
then remove this state when the utility successfully
completes. Therefore, if the -DISPLAY DATABASE
command is issued after the successful completion of
the utility, the restrictive state set by the utility is not
displayed. 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 *Codes*, or to
the description of the DSNT501I message in *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 Part 2 of
Diagnosis Guide and Reference for information on
identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- Copy of the log for this period, so that additional DSN1LOGP reports can be produced for problem determination.

00C90084

Explanation: DB2 cannot find space for creating a temporary file or for inserting data into a temporary file because the workfile database is full. DB2 cannot perform the requested actions because of one of the following reasons:

- You are running a large number of concurrent transactions requiring the use of temporary files.
- There is no space available in any of the tablespaces in the workfile database.

System action: The reason code appears in a DSNT501I message, and the requested operation is not performed, and SQLCODE -904 might be issued.

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. Refer to the SQL return code in Part 1, "SQL codes," on page 1. For more information, refer to the explanation of message DSNT500I in *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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.

- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- IDCAMS LISTCAT output for the ICF (VSAM) catalog that contains the DB2 subsystem catalog that defined the failing index or table.
- 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.

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.

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 *Codes*, or to the description of the DSNT500I message in *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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.

- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Source listing of the failing application program.
- 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.
- Precompiler listing of failing application program with SOURCE(YES) and XREF(YES) specified.

00C90086

Explanation: An attempt was made to allocate a resource that is started for DB2 utility access only.

System action: The allocation process is not allowed.

Operator response: If this reason code appears in message DSNT501I, determine whether the resource should be started for utility access only.

User response: Determine when the resource is available for use, and rerun the job.

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 *Codes*, or to the description of the DSNT500I message in *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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:
- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.

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.

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 be 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 DSNT500I is issued. For more information, refer to the SQL return code in *Codes*, or to the description of the DSNT500I message in *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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:
- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.

00C90088

Explanation: The resource identified by NAME in message DSNT501I is involved in a deadlock condition.

System action: The requested operation is not performed.

System programmer response: If the deadlock condition becomes chronic, examine the mix of applications running to determine why the deadlock is occurring.

User response: Rerun the application.

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 *Codes*, or to the description of the DSNT501I message in *Messages*.\

If statistics trace class 3 is active, IFCID 172 contains diagnostic information. For a discussion of the effects of locking, see DB2 Performance Monitoring and Tuning Guide. If you suspect an error in DB2, refer to Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00C90089 • 00C9008A

Collect the following diagnostic items:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- IRLM trace output.
- 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.
- Listing of the IRLM procedure.
- Results from SELECT * from SYSIBM.SYSDATABASE.

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).

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. 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 DSNT500I is issued. For more information, refer to the SQL return code in *Codes*, or to the description of the DSNT500I message in *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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.

00C9008A

Explanation: The database procedure installation exit identified by NAME could not be loaded for execution.

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 DSNT500I is issued. For more information, refer to the SQL return code in *Codes*, or to the description of the DSNT500I message in *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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.

00C9008B

Explanation: An attempt was made to create a database, but no DBIDs are available; that is, the system limit has been reached.

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 DSNT500I is issued. For more information, refer to the SQL return code in *Codes*, or to the description of the DSNT500I message in *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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.

00C9008C

Explanation: An attempt was made to allocate or bind to a partitioned table space for which no partitioning key was defined.

System action: The bind or allocation process is not allowed.

User response: Define the partitioning key or partitioning 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 *Codes*, or to the description of the DSNT501I message in *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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Listing of DB2 catalog tables.
- Source listing of the failing application program.
- 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.
- DB2 log output, including any DB2 recovery log archive tapes.
- Definitions of views and tables involved in the error.

00C9008D

Explanation: An attempt was made to bind to a table space that had an incomplete clustering definition.

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 *Codes*, or to the description of the DSNT501I message in *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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Listing of DB2 catalog tables.
- Source listing of the failing application program.

- 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.
- DB2 log output, including any DB2 recovery log archive tapes.
- Definitions of views and tables involved in the error.

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.

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 *Codes*, or to the description of the DSNT501I message in *Messages*. 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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- IRLM trace output.
- 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.
- Listing of the IRLM procedure.
- Results from SELECT * from SYSIBM.SYSDATABASE.

00C9008F

Explanation: The database descriptor's size (DBD) has reached the limit of 25% of the EDM Pool size.

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 SYSCOPY rows to delete.

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 *Codes*, or to the description of the DSNT500I message in *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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.

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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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- DB2 log output, including any DB2 recovery log archive tapes.

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.

System action: The START operation is not performed.

Problem determination: Message DSNI002I 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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- DB2 log output, including any DB2 recovery log archive tapes.

00C90092

Explanation: DB2 received an out-of-storage indication from IRLM resulting from a lock, unlock, or lock change request.

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 DB2 Performance Monitoring and Tuning 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 DB2 Performance Monitoring and Tuning 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 Part 4 of *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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- IRLM trace output.
- 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.
- Definitions of views and tables involved in the error.
- Listing of the IRLM procedure.

00C90093

Explanation: An error occurred in IRLM.

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 CTSIWHY contain the return code from the IRLM function. The fifth byte of CTSIWHY 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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- IRLM trace output.
- 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.
- Definitions of views and tables involved in the error.
- Listing of the IRLM procedure.

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00C90094

Explanation: A data set is in a different state than DB2 expects, which might occur as a result of the following situations:

- A data set was deleted and redefined, but DB2 does not recognize the redefined data set.
- A previous DB2 failure damaged the data set in some way.

System action: The requested action is not performed. If the invoker of this module abends, a record is written to SYS1.LOGREC, and the invoker might initiate a dump. If the invoker does not abend, no record is written, and no dump is requested. If this occurs, an SQL return code is issued, or message DSNT500I is issued, or both. The data set is placed in a stopped status unless the invoker of the module is a utility.

Operator response: Notify the system programmer.

System programmer response: If you do not have the

current level of the data set, you must perform DB2 recovery to return the data set to its expected state. See the Problem Determination section of this message to learn how to determine the name of the data set to be corrected. Use the DISPLAY command to check the status of the data set. If the data set is stopped, use the START command before performing recovery.

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 *Administration Guide* in the section "Recovering Catalog and Directory Objects".

Problem determination: For more information, refer to the SQL return code in *Codes*, or to the description of the DSNT501I message in *Messages*.

This error is detected at a time when DB2 cannot determine the specific name of the data set involved. However, the SQL return code or message DSNT500I provides the name of the table space or index space where the data set resides. 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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- IDCAMS LISTCAT output for the ICF (VSAM) catalog that contains the DB2 subsystem catalog that defined the failing index or table.
- 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.
- DB2 log output, including any DB2 recovery log archive tapes.

- Definitions of views and tables involved in the error.

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 DSNI001I.

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. One 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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Dump of the index or table space that failed.
- 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.
- DB2 log output, including any DB2 recovery log archive tapes.

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.

00C90097

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.

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.

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 DB2 Performance Monitoring and Tuning Guide for further information about choosing the value for NUMLKUS.

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 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.

Problem determination: An SQLCODE -904 and message DSNT500I or DSNT501I are issued. For more information, refer to the SQL return code in *Codes*, or to the description of messages DSNT500I and DSNT501I in *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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.

00C90097

Explanation: An attempt was made to allocate to a table space for update operations. However, the table space was marked as 'image copy' required, and updates are not allowed. This condition occurs as a result of any of the following:

- Running a REORG LOG NO or LOAD LOG NO utility on the table space without running a copy that specifies FULL YES.
- Execution of a RECOVER utility which specifies the TORBA or TOCOPY options, without following it with the required COPY utility.
- Execution of a -TERM UTILITY command on a COPY utility that failed during the copy phase or was active in the copy phase. Until the COPY utility completes, SQL updates are not allowed because the the integrity of the data would be compromised.
- Execution of a MODIFY utility after all back up copies of the table space or data set were deleted from the SYSCOPY catalog table.

System action: The allocation process is not allowed.

User response: Run the COPY utility. However, if the table space is to be used for read-only access, or if recoverability of the data is not required, instead of taking a full image copy you can run the REPAIR utility and request that the image copy required condition be removed.

Problem determination: The requested operation is not performed. An SQLCODE -904 and/or message DSNT501I is issued. For more information, refer to the SQL return code in *Codes*, or to the description of the DSNT501I message in *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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.

00C90098

Explanation: An attempt was made to increase read-only or write-access counts of the utility in process beyond the maximum (255) allowed.

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.

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.

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.

System action: The requested action is not performed.

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.

User response: Redefine the High Key values in the Index and retry the load.

If you receive 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.

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:

- 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.
- 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.
- Definitions of table spaces, tables, and indexes involved in the error.

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.

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 *Codes*, or to the description of the DSNT500I message in *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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.

- Results from SELECT * from SYSIBM.SYSDATABASE.
- Print of the BSDS record with the key of X'16000001', obtained by running IDCAMS.

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.

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 *Messages*.

Collect the following diagnostic items:

- 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.
- 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.
- Definitions of table spaces, tables, and indexes involved in the error.

00C9009C

Explanation: An attempt was made to insert data into a partitioned table space, partition-by-growth 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. For partition-by-growth table spaces, the number of partitions cannot grow beyond the limit specified by MAXPARTITIONS.

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.

System programmer response: Refer to Part 2 of the *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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer to redefine the partitions and rerun the job.

Change the limit specified in MAXPARTITIONS if you received this error because the number of partitions in your partition-by-growth table spaces exceeded the limit that is declared for MAXPARTITIONS.

Problem determination: For more information, refer to the explanation of message DSNT501I in *Messages*.

Collect the following diagnostic items:

- 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.
- Definitions of table spaces, tables, and indexes involved in the error.

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.

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.

System programmer response: The table space or index space name is identified in the DSNT501I 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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer to reclaim some free space in the associated table space or index space and rerun the job.

Problem determination: For more information, refer to the explanation of message DSNT501I in *Messages*.

Collect the following diagnostic items:

- 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.
- Definitions of table spaces, tables, and indexes involved in the error.

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.

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 Part 2 of *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 Part 1, "SQL codes," on page 1. You can also refer to the description of the DSNT500I and DSNT501I messages in *Messages*.

Collect the following diagnostic items:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00C9009F

Explanation: A table has been referenced that has a primary key or unique 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.

System action: The use of the table is not allowed.

User response: Create a unique index on the referenced table to enforce the primary key or unique key.

Problem determination: The requested operation is not performed. An SQLCODE -904 or -923 is issued. For more information, refer to the SQL return code in *Codes*, or to the description of the DSNT501I message in *Messages*.

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.

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.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

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 to Appendix G, "ABEND codes associated with DSN1COPY misuse," on page 889 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.

00C90102 • 00C90103

The name of the CSECT involved is given in VRARRK5. The full CSECT name given in the dump title.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Detailed description of events immediately prior to and during the abend.
- 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.
- DB2 log output, including any DB2 recovery log archive tapes.
- DB2 REPAIR dump of the pages identified in DSNI014I messages.
- CHECK utility output.

If the abend reason code was issued by a CSECT with name DSNGxxxx, where 'xxxx' is any value, make a copy of DSNDB01.DBD01, DSNDB01.SCT02, and DSNDB01.DSNSCT02 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.

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 Part 2 of *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	Content
2	Address of the page set block (PB)
3	Address of the log record, if any
8	Address of the buffer block (BB)
9	Address of the page buffer

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Listing of DB2 log output.
- Dump of the index or table space that failed.
- 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.

00C90103

Explanation: Bad data was returned from either the edit or the validation exit.

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 Part 2 of *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 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.

00C90105

Explanation: An inconsistent page was detected. This has been caused by a DB2 internal error.

System action: A record is written to SYS1.LOGREC, an SVC dump is requested, and the page will be scheduled for automatic recovery. If automatic recovery is successful, message DSNB215I is issued. If automatic recovery fails, message DSNI012I is issued, and an abend '04E' with reason code 00C90102 will occur.

Note: If the resource required for automatic recovery is in use, automatic recovery will be delayed until the resource is available.

System programmer response: Refer to *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:

GPR	Content
2	Address of the page set block (PB)
3	Address of the log record, if any
8	Address of the buffer block (BB)
9	Address of the page buffer

Also, refer to Appendix G, "ABEND codes associated with DSN1COPY misuse," on page 889 for further information on DSN1COPY misuse.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Listing of DB2 log output.
- Dump of the index or table space that failed.
- 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.

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.

System action: A record is written to SYS1.LOGREC, an SVC dump is requested, and the DB2 restart is terminated.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *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 the SYSLOG data set for the period of time spanning the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- DB2 log output, including any DB2 recovery log archive tapes.

00C90107

Explanation: At commit phase 1, a nonzero write intent count was detected. An error in DB2 logic is probably responsible for this condition.

System action: A record is written to SYS1.LOGREC, an SVC dump is requested. The thread is aborted.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *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 the SYSLOG data set for the period of time spanning the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Detailed description of events immediately prior to and during the abend.

- 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.
- DB2 log output, including any DB2 recovery log archive tapes.

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.

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 Part 2 of *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 the SYSLOG data set for the period of time spanning the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Detailed description of events immediately prior to and during the abend.
- 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.
- DB2 log output, including any DB2 recovery log archive tapes.

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.

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 Part 2 of *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 the SYSLOG data set for the period of time spanning the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Detailed description of events immediately prior to and during the abend.
- 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.
- DB2 log output, including any DB2 recovery log archive tapes.

00C9010B

Explanation: The data manager detected an internal error within DB2. This error might be in an internal DB2 control structure or code.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested.

System programmer response: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic area (SDWA). Significant fields for this code are:

- VRARRK5, which contains the name of the control section that issued this code
- VRARRK6
- VRARRK7
- VRARRK8
- VRARRK9.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00C9010C

Explanation: The data manager detected an internal error within DB2. This error might be in an internal DB2 control structure or code.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested.

System programmer response: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic area (SDWA). Significant fields for this code are:

- VRARRK5, which contains the name of the control section that issued this code
- VRARRK6
- VRARRK7
- VRARRK8
- VRARRK9.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00C9010D

Explanation: The data manager detected an internal error within DB2. This error might be in an internal DB2 control structure or code.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested.

System programmer response: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic area (SDWA). Significant fields for this code are:

- VRARRK5, which contains the name of the control section that issued this code
- VRARRK6
- VRARRK7
- VRARRK8
- VRARRK9.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).

- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00C9010E

Explanation: The data manager detected an internal error within DB2. This error might be in an internal DB2 control structure or code.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested.

System programmer response: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic area (SDWA). Significant fields for this code are:

- VRARRK5, which contains the name of the control section that issued this code
- VRARRK6
- VRARRK7
- VRARRK8
- VRARRK9.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00C9010F

Explanation: The data manager detected an internal error within DB2. This error might be in an internal DB2 control structure or code.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested.

System programmer response: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic area (SDWA). Significant fields for this code are:

- VRARRK5, which contains the name of the control section that issued this code
- VRARRK6
- VRARRK7

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| • VRARRK8
| • VRARRK9.

| Collect the following diagnostic items:
| • 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.
| • Dynamic dump, taken to SYS1.DUMPxx data set, by
| DB2 (04E and 04F abends).
| • Listing of SYS1.LOGREC data set, obtained by
| executing IFCEREP1.

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 OBD should be located. However, in this case the OBD expected was not at the indicated offset.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The DBD in use at the time of the abend is inconsistent in storage and may be inconsistent on DASD. 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:
- 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.

- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Unformatted DSN1PRNT output of the DSNDB01.DBD01 page set. Use the method described in Part 5 of *Diagnosis Guide and Reference* to locate the inconsistent DBD in the DSNDB01.DBD01 page set.
- The results of the following SQL statements, where *dbid* is the DBID of the damaged DBD:

```
SELECT * FROM SYSIBM.SYSINDEXES
    WHERE DBID=dbid ORDER BY OBID;
SELECT * FROM SYSIBM.SYSINDEXES
    WHERE DBID=dbid ORDER BY ISOBID;
SELECT * FROM SYSIBM.SYSLINKS
    WHERE DBID=dbid ORDER BY OBID;
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 OBDs are inconsistent with the DB2 catalog. Use Part 5 of *Diagnosis Guide and Reference* to analyze the DBD.

- DSN1LOGP output with DBID (1) OBID (1F) covering the period of time in which the DBD inconsistency might have occurred. This period of time is approximately from the time of the abend back to the time when the DB2 catalog and DBD were believed to be consistent.
- Copy of the log for this period, so that additional DSN1LOGP reports can be produced for problem determination.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Since the DB2 directory does not agree with the DB2 catalog, either of these may be

inconsistent. Since the nature and extent of the inconsistency between the DB2 catalog 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 DSNDB01.DBD01 or DSNDB06.SYSDBASE page sets.
- A DB2 internal error.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Unformatted DSN1PRNT output of the DSNDB01.DBD01 page set. Use the method described in Part 5 of *Diagnosis Guide and Reference* to locate the inconsistent DBD in the DSNDB01.DBD01 page set.
- The results of the following SQL statements, where *dbid* is the DBID of the damaged DBD:

```
SELECT * FROM SYSIBM.SYSINDEXES
   WHERE DBID=dbid ORDER BY OBID;
SELECT * FROM SYSIBM.SYSINDEXES
   WHERE DBID=dbid ORDER BY ISOBID;
SELECT * FROM SYSIBM.SYSLINKS
   WHERE DBID=dbid ORDER BY OBID;
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 OBDs are inconsistent with the DB2 catalog. Use Part 5 of *Diagnosis Guide and Reference* to analyze the DBD.

- DSN1LOGP output with DBID (1) OBID (1F) covering the period of time in which the DBD inconsistency might have occurred. This period of time is approximately from the time of the abend back to the time when the DB2 catalog and DBD were believed to be consistent.
- Copy of the log for this period, so that additional DSN1LOGP reports can be produced for problem determination.

00C90112

Explanation: The data manager detected an inconsistent data condition. There may be more than one object with the same OBID in the DB2 Catalog. 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 Part 2 of *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:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Unformatted DSN1PRNT output of the DSNDB01.DBD01 page set. Use the method described in Part 5 of *Diagnosis Guide and Reference* to locate the inconsistent DBD in the DSNDB01.DBD01 page set.
- The results of the following SQL statements, where *dbid* is the DBID of the damaged DBD:

```
SELECT * FROM SYSIBM.SYSINDEXES
   WHERE DBID=dbid ORDER BY OBID;
SELECT * FROM SYSIBM.SYSINDEXES
   WHERE DBID=dbid ORDER BY ISOBID;
SELECT * FROM SYSIBM.SYSLINKS
   WHERE DBID=dbid ORDER BY OBID;
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 OBDs

are inconsistent with the DB2 catalog. Use Part 5 of *Diagnosis Guide and Reference* to analyze the DBD.

- DSN1LOGP output with DBID (1) OBID (1F) covering the period of time in which the DBD inconsistency might have occurred. This period of time is approximately from the time of the abend back to the time when the DB2 catalog and DBD were believed to be consistent.

- Copy of the log for this period, so that additional DSN1LOGP reports can be produced for problem determination.

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00C90120

Explanation: The data manager detected an internal error within DB2. This error might be in an internal DB2 control structure or code.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested.

System programmer response: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic area (SDWA). Significant fields for this code are:

- VRARRK5, which contains the name of the control section that issued this code
- VRARRK6
- VRARRK7
- VRARRK8
- VRARRK9.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00C90121

Explanation: The data manager detected an internal error within DB2. This error might be in an internal DB2 control structure or code.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested.

System programmer response: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic area (SDWA). Significant fields for this code are:

- VRARRK5, which contains the name of the control section that issued this code
- VRARRK6
- VRARRK7
- VRARRK8
- VRARRK9.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

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 Part 2 of *Installation Guide* for a complete list of migration and 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 link 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.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

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.

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.

The name of the CSECT involved is given in VRARRK5. The full CSECT name given in the dump title.

Collect the following diagnostic items:
- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Detailed description of events immediately prior to and during the abend.
- 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.

- DB2 log output, including any DB2 recovery log archive tapes.
- DB2 REPAIR dump of the pages identified in DSNI013I messages.

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 pointer or target row/anchor is in error.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

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 name of the CSECT involved is given in VRARRK5. The full CSECT name given in the dump title.

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:
- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Detailed description of events immediately prior to and during the abend.

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- 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.
- DB2 log output, including any DB2 recovery log archive tapes.
- DB2 REPAIR dump of the pages identified in DSNI013I messages.

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.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: Message DSNI013I is issued to identify the index page. 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.

Run the CHECK utility to determine the extent of index inconsistency if:

- The page type indicated in message DSNI013I is index
- The page type indicated in message DSNI013I 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.

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 name of the CSECT involved is given in VRARRK5. The full CSECT name given in the dump title.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Detailed description of events immediately prior to and during the abend.
- 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.
- DB2 log output, including any DB2 recovery log archive tapes.
- CHECK utility output.
- DB2 REPAIR dump of the pages identified in DSNI013I messages.

00C90206

Explanation: The data manager detected an inconsistent data condition. In this case, a row that should be pointed to by an index does not have an index entry. The error is probably caused by a missing index entry, but it could also be caused by a table update that was not backed out when it should have been.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

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.

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 to Appendix G, "ABEND codes associated with DSN1COPY misuse," on page 889 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.

The name of the CSECT involved is given in VRARRK5. The full CSECT name given in the dump title.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Detailed description of events immediately prior to and during the abend.
- 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.
- DB2 log output, including any DB2 recovery log archive tapes.
- CHECK utility output.
- DB2 REPAIR dump of the pages identified in DSNI013I messages.

00C90207

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.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: Message DSNI013I 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.

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 name of the CSECT involved is given in VRARRK5. The full CSECT name given in the dump title.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Detailed description of events immediately prior to and during the abend.
- 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.
- DB2 log output, including any DB2 recovery log archive tapes.
- DB2 REPAIR dump of the pages identified in DSNI013I messages.

00C90210

Explanation: The data manager detected an inconsistent data condition. In this case, the subpage directory of an index leaf page indicates that a given search key does not belong to any of the subpages. Either this leaf page is the index tree or the nonleaf

00C90211

portion of the index tree lead to this leaf page as the one that should contain the given key.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: Message DSNI013I 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 to Appendix G, "ABEND codes associated with DSN1COPY misuse," on page 889 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.

The name of the CSECT involved is given in VRARRK5. The full CSECT name given in the dump title.

Collect the following diagnostic items:
- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Detailed description of events immediately prior to and during the abend.
- 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.
- DB2 log output, including any DB2 recovery log archive tapes.
- DSN1COPY-generated copy of the index space or table space identified in the DSNI013I messages on tape.

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.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

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.

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 name of the CSECT involved is given in VRARRK5. The full CSECT name given in the dump title.

Collect the following diagnostic items:
- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Detailed description of events immediately prior to and during the abend.
- 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.
- DB2 log output, including any DB2 recovery log archive tapes.
- DB2 REPAIR dump of the pages identified in DSNI013I messages.
- DSN1COPY-generated copy, on tape, of the page set that contains 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.

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.)

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: Message DSNI013I is issued to identify the index leaf 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 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 to Appendix G, "ABEND codes associated with DSN1COPY misuse," on page 889 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.

The name of the CSECT involved is given in VRARRK5. The full CSECT name given in the dump title.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Detailed description of events immediately prior to and during the abend.
- 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.
- DB2 log output, including any DB2 recovery log archive tapes.
- CHECK utility output.
- DSN1COPY-generated copy of the index space or table space identified in the DSNI013I messages on tape.

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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.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

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 to Appendix G, "ABEND codes associated with DSN1COPY misuse," on page 889 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.

00C90214

The name of the CSECT involved is given in VRARRK5. The full CSECT name given in the dump title.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Detailed description of events immediately prior to and during the abend.
- 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.
- DB2 log output, including any DB2 recovery log archive tapes.
- DB2 REPAIR dump of the pages identified in DSNI013I messages.
- DSN1COPY-generated copy, on tape, of the page set that contains 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.

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00C90214

Explanation: The data manager detected a condition of inconsistent data. The description of the index in the index OBD does not match the attributes of an index page. The problems consists of one of the following conditions:

- IPPNUNI does not equal OBDKNUNI,
- IPPTLTH does not equal OBDKLEN,
- IPPOLTH does not equal OBDLENO, or
- If the page is a leaf page, the segmentation flag or number of subpages conflict (IPPNLPG does not equal OBDINLPG or IPPSEGM conflicts with OBDINLPG).

The index space may have been improperly restored by using DSN1COPY or the wrong data set may have been copied for the given index.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: Message DSNI013I will be issued for each index page. It identifies the database, and 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 to Appendix G, "ABEND codes associated with DSN1COPY misuse," on page 889 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.

The name of the CSECT involved is given in VRARRK5. The full CSECT name given in the dump title.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Detailed description of events immediately prior to and during the abend.
- 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.
- DB2 log output, including any DB2 recovery log archive tapes.
- DB2 REPAIR dump of the pages identified in DSNI013I messages.
- DB2 REPAIR dump of the header page (page 0) for each index identified in the DSNI013I messages.
- DSN1COPY-generated copy, on tape, of the page set that contains 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.

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00C90215

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.

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 Part 2 of *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.

User response: Notify the system programmer.

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 to Appendix G, "ABEND codes associated with DSN1COPY misuse," on page 889 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.

The name of the CSECT involved is given in VRARRK5. The full CSECT name given in the dump title.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Detailed description of events immediately prior to and during the abend.
- 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.

- DB2 log output, including any DB2 recovery log archive tapes.
- DB2 REPAIR dump of the pages identified in DSNI013I messages.
- DB2 REPAIR dump of the header page (page 0) for each index identified in the DSNI013I messages.
- DSN1COPY-generated copy, on tape, of the page set that contains 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1 and ISDASDA0.
- DSN1COPY-generated copy of the table and index, taken before any recovery is performed.

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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.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

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 to Appendix G, "ABEND codes associated with DSN1COPY misuse," on page 889 for further information on DSN1COPY misuse.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00C90218 • 00C90219

- 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.
- DB2 log output, including any DB2 recovery log archive tapes.
- DB2 REPAIR dump of the pages identified in DSNI013I messages.
- DSN1COPY-generated copy, on tape, of the page set that contains 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.
- Detailed description of events prior to the abend, such as recovery or other activity affecting DSNDB06.SYSDBASE, DSNDB01.DSD01, or the subject table spaces.
- Definitions of table spaces, tables, and indexes involved in the error. The object identifiers (OBIDs) identified with each table in the table space with the error can be obtained from SYSIBM.SYSTABLES.

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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.

System action: A record is written to SYS1.LOGREC and an SVC dump is requested.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

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.

The name of the CSECT involved is given in VRARRK5. The full CSECT name given in the dump title.

Refer to Appendix G, "ABEND codes associated with DSN1COPY misuse," on page 889 for further

information on DSN1COPY misuse.

Collect the following diagnostic items:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- 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.
- Definitions of table spaces, tables, and indexes involved in the error.

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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).

System action: A record is written to SYS1.LOGREC and an SVC dump is requested.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

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.

The name of the CSECT involved is given in VRARRK5. The full CSECT name given in the dump title.

Refer to Appendix G, "ABEND codes associated with DSN1COPY misuse," on page 889 for further information on DSN1COPY misuse.

Collect the following diagnostic items:

- 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.

- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- 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.
- Definitions of table spaces, tables, and indexes involved in the error.

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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.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: Message DSNI013I is issued to identify the data page that contains the bad data record. 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.

The name of the CSECT involved is given in VRARRK5. The full CSECT name given in the dump title.

Refer to Appendix G, "ABEND codes associated with DSN1COPY misuse," on page 889 for further information on DSN1COPY misuse.

Collect the following diagnostic items:
- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- 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.
- Definitions of table spaces, tables, and indexes involved in the error.

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.

System action: A record is written to SYS1.LOGREC and an SVC dump is requested.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

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.

The name of the CSECT involved is given in VRARRK5. The full CSECT name given in the dump title.

Collect the following diagnostic items:
- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- 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.
- Definitions of table spaces, tables, and indexes involved in the error.

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.
- DSNDB01.DBD01 was regressed to a time prior to a table being created.

If you suspect an error in DB2, refer to Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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.

System programmer response: Determine if improper procedures were used to restore the table space or DBD that would lead to the inconsistency.

User response: Notify the system programmer.

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 DSNDB01.DBD01.

Also collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Detailed description of events immediately prior to and during the abend.
- 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.
- DB2 log output, including any DB2 recovery log archive tapes.
- Definitions of table spaces, tables, and indexes involved in the error.

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.

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.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- IDCAMS LISTCAT output for the ICF (VSAM) catalog that contains the DB2 subsystem catalog that defined the failing index or table.
- VTOC listing of the disk volume on which the failing operation occurred.
- Detailed description of events immediately prior to and during the abend.
- 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.
- DB2 log output, including any DB2 recovery log archive tapes.
- Definitions of table spaces, tables, and indexes involved in the error.
- DSN1COPY-generated copy of the index space or table space identified in the DSNI013I messages on tape.

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.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- 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.
- Definitions of table spaces, tables, and indexes involved in the error.

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.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested.

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 Part 2 of *Diagnosis Guide and Reference*

for information on identifying and reporting the problem.

User response: Notify the system programmer.

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.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

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

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Detailed description of events immediately prior to and during the abend.
- 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.
- DB2 log output, including any DB2 recovery log archive tapes.

. 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.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

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 to Appendix G, "ABEND codes associated with DSN1COPY misuse," on page 889 for further information on DSN1COPY misuse.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).

- 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.
- Definitions of table spaces, tables, and indexes involved in the error.

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.

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.

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.

User response: Notify the system programmer.

Problem determination: Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Detailed description of events immediately prior to and during the abend.
- DB2 log output, including any DB2 recovery log archive tapes.

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.

System action: A record is written to SYS1.LOGREC and an SVC dump is requested.

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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- Definitions of table spaces, tables, and indexes involved in the error.

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: 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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00C90305

Explanation: The limit on the space usage of the work file storage by an agent was exceeded. The space usage limit is determined by the *zparm keyword* MAXTEMPS.

System action: The SQL statement was terminated with an SQLCODE -904 and this reason code.

User response: Examine the application and determine why the limit was exceeded.

Problem determination: An application used too much work file storage space. Examine the limit set for MAXTEMPS. Adjust the limit as appropriate.

00C90611

Explanation: The Security Server was unable to process this row level, Multilevel Security (MLS) request.

System action: The requested operation is not performed.

System programmer response: Refer to the *z/OS Security Server RACF Security Administrator's Guide* for an explanation of the SAF/RACF return/reason codes in the resource name, and for corrective action advice.

00C90614

Explanation: DB2 attempted to load a DBD during DB2 startup in deferred mode.

System action: Startup continues, and the DBD is not loaded.

System programmer response: After the DB2 startup, completes, the DBD can be loaded or recovered.

Chapter 9. X'D1......' codes

Reason code identifiers that begin with 00D1 communicate normal and error situations with the recovery log manager.

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:

MODID
> Name of module issuing the abend

LEVEL
> Change level

COMPONENT
> Subcomponent ID

REGISTERS
> General purpose registers (GPRs) 0 through 15 at time of abend

---

00D1F001

Explanation: An internal error was detected during log manager processing.

System action: The request is terminated and a SVC dump is scheduled.

System programmer response: Collect the following documentation and contact the IBM Support Center:

- SVC dump
- Syslog
- SYS1.LOGREC entries from the time of the error
- Additional documentation may be required depending on the exact nature of the error.

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).

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 00D10010 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 application 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 non-zero return codes and nonzero reason codes, refer to Appendix C of *Administration Guide*.

System programmer response: Correct the RANGE RBA parameter input, and resubmit the request.

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.

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 of *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.

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 non-zero return codes and nonzero reason codes, refer to Appendix C of *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).

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 SLRFRG15. The ACB error code (ACBERFLG) 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.

System programmer response: Refer to the *z/OS DFSMS: 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 FUNC=OPEN request.

00D10014

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.

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 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 non-zero return codes and nonzero reason codes, refer to Appendix C of *Administration Guide*.

System programmer response: Two choices are available:

1. Continue to use the BSDS method of access. If this choice is made, then the FUNC=OPEN invocation must specify a range of RBAs to be examined by use of the RANGE parameter.
2. Replace the use of the BSDS method of access. This can be done be using explicit archive data set ddnames and/or active log data set ddnames in the JCL used to invoke the user-written application program.

00D10015

Explanation: The DB2 stand-alone log services OPEN processing macro (DSNJSLR) issued this reason code. The VSAM OPEN of the bootstrap data set was successful but the record format of the BSDS is invalid. An invalid BSDS is the result of a failure during a prior attempt to run conversion program DSNJCNVB.

System action: In response to DSNJSLR FUNC=OPEN call, DB2 places a return code of 12 in register 15 and a reason code of 00D10015 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 of *Administration Guide*.

System programmer response: The procedure for running program DSNJCNVB includes making a copy of the BSDS prior to conversion. Restore the BSDS to the original pre-conversion copy, and retry the conversion. When the BSDS data set has been successfully converted, rerun the original application program.

00D10016

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.

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

which reacts to the nonzero return codes and nonzero reason codes, refer to Appendix C of *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.

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 which reacts to the nonzero return codes and nonzero reason codes, refer to Appendix C of *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.

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 of *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.

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 SLRFRG15. 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.

System programmer response: Refer to the *z/OS DFSMS: 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 FUNC=OPEN request.

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).

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 non-zero return codes and nonzero

reason codes, refer to Appendix C of *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.

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 00D10021 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.

If you suspect an error in DB2, refer to Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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 Part 2 of *Diagnosis Guide and Reference* 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.

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 non-zero return codes and nonzero reason codes, refer to Appendix C of *Administration Guide*.

System programmer response: As mentioned above, this may or may not be an intentional error. Check the RBA range specified on the RANGE parameter to determine if the end RBA value was in 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 Part 2 of *Diagnosis Guide and Reference* for information about recovery from log failures.

00D10023

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, and a conditional restart record has been found beyond a conditional restart truncation point. This condition exists when a log RBA gap was intentionally forced by the user as part of log truncation during conditional restart.

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 00D10023 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 length, address, and RBA of the conditional restart record are placed in fields SLRFRCLL, SLRFFRAD and SLRFRBA, respectively.

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 non-zero return codes and nonzero reason codes, refer to Appendix C of *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 Part 2 of *Diagnosis Guide and Reference* 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.

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 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 non-zero return codes and nonzero reason codes, refer to Appendix C of *Administration Guide*.

System programmer response: The DD statements in the user's Job Control Language (JCL) must specify the log data sets in ascending log RBA range order. If both ARCHIVE and ACTIVEn DD statements are included, the first archive data set must contain the lowest log RBA value.

Use the print log map (DSNJU004) utility to obtain a listing of the RBA ranges associated with each archive log data set and active log data set. If necessary:

- Adjust the concatenation sequence of the archive data sets in the user's JCL to ensure that the log records are read in ascending RBA sequence.

- Adjust the order of the active log data sets such that the RBA range is arranged in ascending order, starting with the ACTIVE1 ddname, and progressing through the ACTIVEn ddname.

Following the above adjustments, resubmit the user's JCL.

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.

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 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.

System programmer response: Refer to the *z/OS DFSMS: 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.

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 non-zero return codes and nonzero reason codes, refer to Appendix C of *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 ACTIVEn 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).

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 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.

System programmer response: Refer to the *z/OS DFSMS: 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.

00D10028

Explanation: The DB2 stand-alone log services OPEN processing macro (DSNJSLR) issued this reason code. Both LRSN range and CI 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.

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 of *Administration Guide*.

00D10029

Explanation: The DB2 stand-alone log services OPEN processing macro (DSNJSLR) issued this reason code. The BSDS data set of a member named in the BSDS data set pointed to by the GROUP DD statement cannot be allocated.

System action: In response to DSNJSLR FUNC=OPEN call, DB2 places a return code of 12 in register 15 and a reason code of 00D10029 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: Make sure the BSDS data set of every member named in the BSDS data set pointed to by the GROUP DD statement is available for allocation. If the missing BSDS data set belongs to a member that is no longer active and its BSDS data set does not exist any more, then do not use GROUP DD to allocate required BSDS and log data sets. To read log records of other active members, specify a MxxBSDS DD statements for each active member. The print log map (DSNJU004) utility can be used to find the name of every member's BSDS data set.

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 of *Administration Guide*.

00D1002A

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.

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 00D1002A 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 OPEN error return code is placed in SLRFRG15. The ACB error code (ACBERFLG) 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.

System programmer response: Refer to the *z/OS DFSMS: 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.

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 of *Administration Guide*.

System programmer response: Refer to the *z/OS DFSMS: 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.

If the SLRFERCD field contains X'1001' (decimal 4097), then the error is the result of an inconsistency between the TESTCB parmlist generated in DSNJRS03 and the level of MVS under which the application program was executed. Contact IBM for assistance if SLRFERCD reflects this value.

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.

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.

System programmer response: Refer to the *z/OS DFSMS: 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.

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.

System programmer response: Refer to the *z/OS DFSMS: 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 SLRFDDNM 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.

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 non-zero return codes and nonzero reason codes, refer to Appendix C of *Administration Guide*.

System programmer response: On a FUNC=OPEN call, the RBR value is returned in register 1. The application program must preserve this value for all subsequent stand-alone FUNC=GET and FUNC=CLOSE calls. Due to an application program logic error in the program which invokes the stand-alone log services, the RBR value has been compromised. Repair the application program, and resubmit the application job.

00D10031

Explanation: The DB2 stand-alone log services GET processing macro (DSNJSLR) issued this reason code. The GET processing has requested an RBA in a log data set which was previously not opened. The user's Job Control Language (JCL) has specified that the bootstrap data set (BSDS) be used as the guide to determining which log data sets are required. An attempt to dynamically allocate the appropriate log data set (via MVS SVC 99) failed.

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 00D10031 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 SLRFRC 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 non-zero return codes and nonzero reason codes, refer to Appendix C of *Administration Guide*.

System programmer response: Refer to the appropriate MVS publication to determine the meaning of the SVC 99 error code (S99ERROR) returned in SLRFRG15, and SVC 99 information code (S99INFO) returned in SLRFINFO. 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.

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 RDJFCB error code is placed in SLRFRG15. 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 non-zero return codes and nonzero reason codes, refer to Appendix C of *Administration Guide*.

System programmer response: Refer to the DFSMS/MVS: Using Advanced Services to determine the meaning of the RDJFCB error code returned in SLRFRG15. 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.

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.

If you suspect an error in DB2, refer to Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem. You can also view this source 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.

System programmer response: Determine the cause of the QSAM OPEN 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.

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 non-zero return codes and nonzero reason codes, refer to Appendix C of *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.

00D10050

Explanation: The DB2 stand-alone log services GET processing macro (DSNJSLR) issued this reason code. The bootstrap data set (BSDS) was erroneously specified as one of the ARCHIVE data sets in the user's Job Control Language (JCL). Consequently, the GET request failed.

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 00D10050 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 of the requested log record control interval 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 non-zero return codes and nonzero reason codes, refer to Appendix C of *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.

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 non-zero return codes and nonzero reason codes, refer to Appendix C of *Administration Guide*.

System programmer response: The RDF/CIDF control information in the CI has been compromised. If the SLRFRCLL field indicates a value greater than expected, then the data within the CI can still be used by the application program. If the SLRFRCLL field

indicates a value less than expected, then the data within the CI in all likelihood can still be used, but with caution (additional error checking routines may be required by the user program).

00D10062

Explanation: The DB2 stand-alone log services GET processing macro (DSNJSLR) issued this reason code. The requested record was found to be a middle 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.

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 non-zero return codes and nonzero reason codes, refer to Appendix C of *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.

00D10063

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.

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 00D10063 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.

System programmer response: Several possibilities exist for the cause of this condition:

- The Recovery Log Manager component of DB2 did not originally construct the log record header (LRH) properly.
- The 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.

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.

System action: DB2 startup is terminated.

Operator response: Notify the system programmer.

System programmer response: Run the change log inventory (DSNJU003) utility with a CRESTART 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 part 2 of *Diagnosis Guide and Reference* for more information.

00D10102

Explanation: A request to disable data sharing failed.

System action: DB2 startup terminates.

Operator response: Collect an SVC dump, and contact the system programmer.

System programmer response: Obtain the SVC dump for the return code. To disable data sharing, you must run the disable data sharing job (DSNTIJGF) and then restart DB2. For more information, see Part 2 of .

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.

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.

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.

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 2 of .

00D10106

Explanation: DB2 failed to update an internal control record in the BSDS for data sharing.

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.

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 for re-enable in the shared communications area (SCA) structure.

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.

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.

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 to enable data sharing.

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.

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).

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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

00D10150

Explanation: An internal logic error occurred during processing.

System action: The error is recorded in SYS1.LOGREC and an SVC dump is requested. 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. This is likely an error in DB2.

Problem determination: Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Contents of the BSDS (both copies if dual BSDS in use) obtained by using the DB2 print log map (DSNJU004) utility.

00D10210

Explanation: An unsuccessful completion of a SET WRITE CURSOR has occurred. An invalid write cursor ID was supplied.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: RLM standard diagnostic information is provided in Chapter 9, "X'D1......' codes," on page 305.

Collect the following diagnostic items:

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Contents of the BSDS (both copies if dual BSDS in use) obtained by using the DB2 print log map (DSNJU004) utility.

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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 Part 2 of *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.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: RLM standard diagnostic information is provided in Chapter 9, "X'D1......' codes," on page 305.

Collect the following diagnostic items:

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Contents of the BSDS (both copies if dual BSDS in use) obtained by using the DB2 print log map (DSNJU004) utility.

00D10221

Explanation: An unsuccessful completion of a LOG WRITE has occurred. An invalid number of areas was specified.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: RLM standard diagnostic information is provided in Chapter 9, "X'D1......' codes," on page 305.

Collect the following diagnostic items:

* Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
* Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
* Contents of the BSDS (both copies if dual BSDS in use) obtained by using the DB2 print log map (DSNJU004) utility.

00D10222

Explanation: An unsuccessful completion of a LOG WRITE has occurred. The record length specified was greater than 32767.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: RLM standard diagnostic information is provided in Chapter 9, "X'D1......' codes," on page 305.

Collect the following diagnostic items:

* Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
* Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
* Contents of the BSDS (both copies if dual BSDS in use) obtained by using the DB2 print log map (DSNJU004) utility.

00D10223

Explanation: There was an attempt to modify a log data set while doing a conditional restart with CSRONLY specified.

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.

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 Chapter 9, "X'D1......' codes," on page 305.

Collect the following diagnostic items:

* Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
* Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
* Contents of the BSDS (both copies if dual BSDS in use) obtained by using the DB2 print log map (DSNJU004) utility.

00D10231

Explanation: An unsuccessful completion of a CHECK LOG has occurred. The specified RBA is beyond the end of the log.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: RLM standard diagnostic information is provided in Chapter 9, "X'D1......' codes," on page 305.

Collect the following diagnostic items:

* Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
* Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
* Contents of the BSDS (both copies if dual BSDS in use) obtained by using the DB2 print log map (DSNJU004) utility.

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00D10232

Explanation: A request was made to force an LRSN in non-data sharing mode.

System action: DB2 issues an SVC dump and returns an error to the requesting function.

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: The requesting function can be determined from the SVC dump. It has requested a data sharing log manager function in non-data sharing.

If you suspect an error in DB2, refer to Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00D10240

Explanation: An unsuccessful completion of a CLOSE LOG FOR WRITE has occurred. An invalid write cursor ID was supplied.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: RLM standard diagnostic information is provided in Chapter 9, "X'D1......' codes," on page 305.

Collect the following diagnostic items:

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Contents of the BSDS (both copies if dual BSDS in use) obtained by using the DB2 print log map (DSNJU004) utility.

00D10250

Explanation: An unrecoverable error occurred while updating either the BSDS or the MVS catalog to reflect changes in active log data sets.

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 Chapter 9, "X'D1......' codes," on page 305. 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 Part 2 of *Diagnosis Guide and Reference* for information on 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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Contents of the BSDS (both copies if dual BSDS in use) obtained by using the DB2 print log map (DSNJU004) utility.

00D10251

Explanation: An unrecoverable error occurred in the log buffer writer.

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 Chapter 9, "X'D1......' codes," on page 305. 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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Contents of the BSDS (both copies if dual BSDS in use) obtained by using the DB2 print log map (DSNJU004) utility.

00D10252

Explanation:

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 Chapter 9, "X'D1......' codes," on page 305. 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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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 Chapter 9, "X'D1......' codes," on page 305.

Collect the following diagnostic items:

- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Contents of the BSDS (both copies if dual BSDS in use) obtained by using the DB2 print log map (DSNJU004) utility.

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.

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 Chapter 9, "X'D1......' codes," on page 305.

Collect the following diagnostic items:

- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Contents of the BSDS (both copies if dual BSDS in use) obtained by using the DB2 print log map (DSNJU004) utility.

00D10255

Explanation: DSNJR008 attempted to resume the waiting execution unit, and a failure occurred leaving the state of the resume indoubt.

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, refer to Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: RLM standard diagnostic information is provided in Chapter 9, "X'D1......' codes," on page 305. In addition, register 6 has the address of the execution block (EB).

Collect the following diagnostic items:

- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Contents of the BSDS (both copies if dual BSDS in use) obtained by using the DB2 print log map (DSNJU004) utility.

00D10256

Explanation: Recursive abends were detected while trying to reinitialize an archive log read service task.

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 (DSNJU004) utility. If you suspect an error in DB2, refer to Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: RLM standard diagnostic information is provided in Chapter 9, "X'D1......' codes," on page 305.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Contents of the BSDS (both copies if dual BSDS in use) obtained by using the DB2 print log map (DSNJU004) utility.
- 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.

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.

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 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 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 SLRFFRAD and SLRFRCLL, 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 of *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:

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Contents of the BSDS (both copies if dual BSDS in use) obtained by using the DB2 print log map (DSNJU004) utility.

Problem determination: If the reason code is issued by an active DB2 subsystem:

- RLM standard diagnostic information is provided under Chapter 9, "X'D1......' codes," on page 305.
- For additional information about recovery from log failures, refer to Part 4 of *Administration Guide*.

- Refer to Appendix C of *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.

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.

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 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 00D10262 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 beginning of the CI 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 SLRFDDNM.

For additional details about the stand-alone log services, refer to Appendix C of *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:

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Contents of the BSDS (both copies if dual BSDS in use) obtained by using the DB2 print log map (DSNJU004) utility.

Problem determination: If the reason code is issued by an active DB2 subsystem:

- RLM standard diagnostic information is provided under Chapter 9, "X'D1......' codes," on page 305.
- For additional information about recovery from log failures, refer to Part 4 of *Administration Guide*.
- Refer to Appendix C of *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.

00D10263

Explanation: While scanning a log control interval (CI), the VSAM RDF/CIDF control information was found to be incorrect.

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.

00D10264

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 00D10263 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 beginning of the CI 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 SLRFDDNM.

For additional details about the stand-alone log services, refer to Appendix C of *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:
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Contents of the BSDS (both copies if dual BSDS in use) obtained by using the DB2 print log map (DSNJU004) utility.

Problem determination: If the reason code is issued by an active DB2 subsystem:
- RLM standard diagnostic information is provided under Chapter 9, "X'D1......' codes," on page 305.
- For additional information about recovery from log failures, refer to Part 4 of *Administration Guide*.
- Refer to Appendix C of *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.

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 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 00D10264 in register 0. Information about the results of the GET request is also returned in the stand-alone 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 SLRFFRAD and SLRFRCLL, 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 of *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:
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Contents of the BSDS (both copies if dual BSDS in use) obtained by using the DB2 print log map (DSNJU004) utility.

Problem determination: If the reason code is issued by an active DB2 subsystem:
- RLM standard diagnostic information is provided under Chapter 9, "X'D1......' codes," on page 305.
- For additional information about recovery from log failures, refer to Part 4 of *Administration Guide*.

- Refer to Appendix C of *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.

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.
- 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 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 SLRFDDNM.

If you suspect an error in DB2, refer to Part 2 of *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:

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Contents of the BSDS (both copies if dual BSDS in use) obtained by using the DB2 print log map (DSNJU004) utility.

Problem determination: If the reason code is issued by an active DB2 subsystem:

- RLM standard diagnostic information is provided under Chapter 9, "X'D1......' codes," on page 305.
- For additional information about recovery from log failures, refer to Part 4 of *Administration Guide*.
- If you suspect an error in DB2, refer to Part 2 of *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.

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 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 SLRFDDNM.

For additional details about the stand-alone log services, refer to Appendix C of *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:

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Contents of the BSDS (both copies if dual BSDS in use) obtained by using the DB2 print log map (DSNJU004) utility.

Problem determination: If the reason code is issued by an active DB2 subsystem:

- RLM standard diagnostic information is provided under Chapter 9, "X'D1......' codes," on page 305.
- For additional information about recovery from log failures, refer to Part 4 of *Administration Guide*.
- Refer to Appendix C of *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.

00D10267

Explanation: While scanning a log control interval (CI), a middle or last spanned record segment was not the first segment contained in the log CI.

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 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 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 SLRFDDNM.

For additional details about the stand-alone log services, refer to Appendix C of *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:

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Contents of the BSDS (both copies if dual BSDS in use) obtained by using the DB2 print log map (DSNJU004) utility.

Problem determination: If the reason code is issued by an active DB2 subsystem:

- RLM standard diagnostic information is provided under Chapter 9, "X'D1......' codes," on page 305.
- For additional information about recovery from log failures, refer to Part 4 of *Administration Guide*.
- Refer to Appendix C of *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.

00D10268

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.

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 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 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 SLRFDDNM.

For additional details about the stand-alone log services, refer to Appendix C of *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:

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Contents of the BSDS (both copies if dual BSDS in use) obtained by using the DB2 print log map (DSNJU004) utility.

Problem determination: If the reason code is issued by an active DB2 subsystem:

- RLM standard diagnostic information is provided under Chapter 9, "X'D1......' codes," on page 305.
- Refer to Part 4 *Administration Guide* for information about recovery from log failures.
- Refer to Appendix C of *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.

00D10269

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 Part 4 of *Administration Guide* for information about recovery from log failures.

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 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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: RLM standard diagnostic information is provided under Chapter 9, "X'D1......' codes," on page 305.

Collect the following diagnostic items:

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Contents of the BSDS (both copies if dual BSDS in use) obtained by using the DB2 print log map (DSNJU004) utility.

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.

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. Scan the read cursor pool for a cursor with the same EB, or examine through the DB2 trace for the problem. Trace IDs 040301 and 040302 identify OPEN entries while 040303 and 040304 are for CLOSE.

Problem determination: RLM standard diagnostic information is provided in Chapter 9, "X'D1......' codes," on page 305. 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. Register 6 contains the address of the EB.

Collect the following diagnostic items:

- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Contents of the BSDS (both copies if dual BSDS in use) obtained by using the DB2 print log map (DSNJU004) utility.

00D10302

Explanation: An unsuccessful completion of an OPEN LOG FOR READ has occurred. A valid scope was not specified.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: RLM standard diagnostic information is provided in Chapter 9, "X'D1......' codes," on page 305.

Collect the following diagnostic items:

- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Contents of the BSDS (both copies if dual BSDS in use) obtained by using the DB2 print log map (DSNJU004) utility.

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.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: RLM standard diagnostic information is provided in Chapter 9, "X'D1......' codes," on page 305.

Collect the following diagnostic items:

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Contents of the BSDS (both copies if dual BSDS in use) obtained by using the DB2 print log map (DSNJU004) utility.

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00D10304

Explanation: An unknown function was requested in an open of a 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 Part 2 of *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 Part 2 of *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 Part 2 of *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 Part 2 of *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 Part 2 of *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 Part 2 of *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 Part 2 of *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.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: RLM standard diagnostic information is provided in Chapter 9, "X'D1......' codes," on page 305. 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:
* Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
* Contents of the BSDS (both copies if dual BSDS in use) obtained by using the DB2 print log map (DSNJU004) utility.

00D10311

Explanation: An unsuccessful completion of a SET READ CURSOR RANGE has occurred. An invalid write cursor ID was specified.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: RLM standard diagnostic information is provided in Chapter 9, "X'D1......' codes," on page 305. 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:

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Contents of the BSDS (both copies if dual BSDS in use) obtained by using the DB2 print log map (DSNJU004) utility.

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.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: RLM standard diagnostic information is provided in Chapter 9, "X'D1......' codes," on page 305.

Collect the following diagnostic items:

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).

- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Contents of the BSDS (both copies if dual BSDS in use) obtained by using the DB2 print log map (DSNJU004) utility.

00D10319

Explanation: Log rollback processing has been canceled by an operator command.

System action: The current log read request terminates and the reason code is returned to the log read requestor.

Operator response: Examine the console for additional messages regarding the canceling of the log rollback process.

00D10322

Explanation: An unsuccessful completion of a LOG READ has occurred. MODE=DIRECT with a record matching the specified TYPE was not found.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: RLM standard diagnostic information is provided in Chapter 9, "X'D1......' codes," on page 305.

Collect the following diagnostic items:

- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Contents of the BSDS (both copies if dual BSDS in use) obtained by using the DB2 print log map (DSNJU004) utility.

00D10323

Explanation: An unsuccessful completion of a LOG READ has occurred. MODE=DIRECT with record matching the specified SCOPE is not found.

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 Part 2 of *Diagnosis Guide and*

Reference for information on identifying and reporting the problem.

Problem determination: RLM standard diagnostic information is provided in Chapter 9, "X'D1......' codes," on page 305.

Collect the following diagnostic items:
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Contents of the BSDS (both copies if dual BSDS in use) obtained by using the DB2 print log map (DSNJU004) utility.

00D10324

Explanation: An unsuccessful completion of a LOG READ has occurred. MODE=DIRECT with record matching the specified CDATA is not found.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: RLM standard diagnostic information is provided in Chapter 9, "X'D1......' codes," on page 305.

Collect the following diagnostic items:
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Contents of the BSDS (both copies if dual BSDS in use) obtained by using the DB2 print log map (DSNJU004) utility.

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.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: RLM standard diagnostic

information is provided in Chapter 9, "X'D1......' codes," on page 305.

Collect the following diagnostic items:
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Contents of the BSDS (both copies if dual BSDS in use) obtained by using the DB2 print log map (DSNJU004) utility.

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 record requested was on an archive log data set that was in use.

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 Chapter 9, "X'D1......' codes," on page 305.

Collect the following diagnostic items:
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Contents of the BSDS (both copies if dual BSDS in use) obtained by using the DB2 print log map (DSNJU004) utility.

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.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: RLM standard diagnostic information is provided in Chapter 9, "X'D1......' codes," on page 305.

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.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: RLM standard diagnostic information is provided in Chapter 9, "X'D1......' codes," on page 305.

Collect the following diagnostic items:

- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Contents of the BSDS (both copies if dual BSDS in use) obtained by using the DB2 print log map (DSNJU004) utility.

00D10329

Explanation: A LOG READ completed unsuccessfully, because an I/O error occurred while reading the log data set.

Refer to part 2 of *Diagnosis Guide and Reference* for information about recovery from log failures.

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. Also, examine any prior messages with a DSNJ prefix from the log buffer reader.

Problem determination: RLM standard diagnostic information is provided in Chapter 9, "X'D1......' codes," on page 305.

Collect the following diagnostic items:

- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Contents of the BSDS (both copies if dual BSDS in use) obtained by using the DB2 print log map (DSNJU004) utility.

00D1032A

Explanation: An unsuccessful completion of a LOG READ has occurred. BSDS does not map the specified RBA into a log data set. The possible causes for this condition are:

- The BSDS is in error.
- The log data set has been deleted.
- The log data set exists but the RBA cannot be found from this log data set. This situation can happen in a disaster recovery site if the log data set was copied before BSDS was copied.

Refer to Part 2 of *Administration Guide* for information about recovery from BSDS or log failures.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Recovery log manager standard diagnostic information is provided in Chapter 9, "X'D1......' codes," on page 305.

Collect the following diagnostic items:

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Contents of the BSDS (both copies if dual BSDS in use) obtained by using the DB2 print log map (DSNJU004) utility.

00D1032B

Explanation: A LOG READ completed unsuccessfully because an error occurred while trying to allocate a log data set.

Refer to part 2 of *Diagnosis Guide and Reference* 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 Chapter 9, "X'D1......' codes," on page 305.

Collect the following diagnostic items:

- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Contents of the BSDS (both copies if dual BSDS in use) obtained by using the DB2 print log map (DSNJU004) utility.

00D1032C

Explanation: A LOG READ completed unsuccessfully, because an error occurred while opening or closing a log data set.

Refer to part 2 of *Diagnosis Guide and Reference* for information about recovery from log failures.

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 Chapter 9, "X'D1......' codes," on page 305.

Collect the following diagnostic items:

- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Contents of the BSDS (both copies if dual BSDS in use) obtained by using the DB2 print log map (DSNJU004) utility.

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.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: RLM standard diagnostic information is provided in Chapter 9, "X'D1......' codes," on page 305. 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:

- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Contents of the BSDS (both copies if dual BSDS in use) obtained by using the DB2 print log map (DSNJU004) utility.

00D1032E

Explanation: A LOG READ completed unsuccessfully due to an internal error.

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 (RDPLOPT1) 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 Chapter 9, "X'D1......' codes," on page 305.

Collect the following diagnostic item listed in

- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: RLM standard diagnostic information is provided in Chapter 9, "X'D1......' codes," on page 305. 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.

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.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: RLM standard diagnostic information is provided in Chapter 9, "X'D1......' codes," on page 305. 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.

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.

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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: RLM standard diagnostic information is provided in Chapter 9, "X'D1......' codes," on page 305. 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.

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.

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 part 2 of *Diagnosis Guide and Reference* for information on recovering from a log failure during restart and resolving inconsistencies resulting from conditional restart.

Problem determination: In addition to the standard RLM diagnostic information, 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.

System action: The 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 the SVC dump. Notify the system programmer.

System programmer response: Obtain the SYS1.LOGREC and the SVC dump. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: RLM standard diagnostic information is provided in Chapter 9, "X'D1......' codes," on page 305 (X'D1'). In addition, the following diagnostic information is provided in registers:

- Register 0: the Data Mgr ERQUAL that identifies the place within CSECT DSNILGRX 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 *ssnm*DBM1'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.

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 Part 2 of *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.

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 Part 2 of *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 abend processing a LOG READ request.

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 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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

• Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
• Contents of the BSDS (both copies if dual BSDS in use) obtained by using the DB2 print log map (DSNJU004) utility.

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.

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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: RLM standard diagnostic information is provided in Chapter 9, "X'D1......' codes," on page 305. 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.

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.

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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: RLM standard diagnostic information is provided in Chapter 9, "X'D1......' codes," on page 305. 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.

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.

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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: RLM standard diagnostic information is provided in Chapter 9, "X'D1......' codes," on page 305. 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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: RLM standard diagnostic information is provided in Chapter 9, "X'D1......' codes," on page 305.

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 Part 2 of *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 Part 2 of *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 Part 2 of *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 part 2 of *Diagnosis Guide and Reference* for

information on identifying and reporting the problem.

00D10401

Explanation: A BSDS read was requested and the record was not found.

System action: DB2 returns a return code of 4 and reason code of 00D10401 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 Part 2 of *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 Part 2 of *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 Part 2 of *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 Part 2 of *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 Part 2 of *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.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Contents of the BSDS (both copies if dual BSDS in use) obtained by using the DB2 print log map (DSNJU004) utility.

00D10410

Explanation: An unsuccessful completion of a READ BSDS RECORD has occurred. An error has been returned from VSAM.

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 Chapter 9, "X'D1......' codes," on page 305. 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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Contents of the BSDS (both copies if dual BSDS in use) obtained by using the DB2 print log map (DSNJU004) utility.

00D10411

Explanation: An unsuccessful completion of a WRITE UPDATE BSDS RECORD has occurred. An error has been returned from VSAM.

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 Chapter 9, "X'D1......' codes," on page 305. 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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Contents of the BSDS (both copies if dual BSDS in use) obtained by using the DB2 print log map (DSNJU004) utility.

00D10412

Explanation: An unsuccessful completion of a WRITE INSERT BSDS RECORD has occurred. An error has been returned from VSAM.

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 Chapter 9, "X'D1......' codes," on page 305. 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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Contents of the BSDS (both copies if dual BSDS in use) obtained by using the DB2 print log map (DSNJU004) utility.

00D10413

Explanation: An unsuccessful completion of a DELETE BSDS RECORD has occurred. An error has been returned from VSAM.

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 Chapter 9, "X'D1......' codes," on page 305. 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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).

- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Contents of the BSDS (both copies if dual BSDS in use) obtained by using the DB2 print log map (DSNJU004) utility.

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.

System programmer response: Restore the BSDS data set (or data sets) and restart the DB2 subsystem associated with the BSDS.

User response: Notify the system programmer.

Problem determination:

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.

System programmer response: Restore the BSDS data set (or data sets) and restart the DB2 subsystem associated with the BSDS.

User response: Notify the system programmer.

Problem determination:

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 Part 2 of *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 Part 2 of *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).

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 Chapter 9, "X'D1......' codes," on page 305. 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:
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00D10501

Explanation: The recovery log manager's common access method services has been passed a bad function code (DSPLFUNC in control block DSPL).

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 Chapter 9, "X'D1......' codes," on page 305. The address of the DSPL is provided in register 3, and the invalid function in register 4.

Collect the following diagnostic items:
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00D10700

Explanation: An error completion code was returned by SETLOCK OBTAIN.

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 Chapter 9, "X'D1......' codes," on page 305. In addition, register 0 contains the return code from SETLOCK OBTAIN.

Collect the following diagnostic items:
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00D10701

Explanation: An error completion code was returned by SETLOCK RELEASE.

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 Chapter 9, "X'D1......' codes," on page 305. In addition, register 0 contains the return code from SETLOCK RELEASE.

Collect the following diagnostic items:
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00D10800

Explanation: The log manager command processor (DSNJC001) was entered with an invalid Tokenized Command Segment (TCS®).

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: RLM standard diagnostic information is provided under Chapter 9, "X'D1......' codes," on page 305.

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 DSNJC001 CSECT was invoked in error by an execution unit.

00D10901

Explanation: DB2 failed to locate a data sharing member in the SCA.

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: Review the DB2 system console for possible DSN7xxxx messages that could relate to this problem.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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 Part 2 of *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 Part 2 of *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 Part 2 of *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 Part 2 of *Diagnosis Guide and Reference* for information on

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 Part 2 of *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, an SVC dump, and console output.

Problem determination: Run a print log map (DSNJU004) 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 Part 2 of *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, an 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.

00D10909 • 00D10917

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 Part 2 of *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 Part 2 of *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 Part 2 of *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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

Chapter 10. X'D3......' codes

Reason code identifiers that begin with 00D3 communicate normal and error situations with the distributed data facility.

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.

System action: All update operations were backed out.

System programmer response: Determine why the COMMIT failed and retry the application.

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.

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 Part 2 of *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 DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

00D35E4D

Explanation: DB2 has detected an error while parsing an SQLSTT object for an EXCSQLSET command received from a remote requester. The SQLSTT has an invalid object length of less than 4.

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 requester. 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 Part 2 of *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 DSNL032I message. For the DB2 system generating the DSNL032I message, collect the following diagnostic items:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

In addition, identify all connected systems participating in the processing of the remote request. This includes the requester system to which the application is connected and the data server which is the target of the remote request. This may also include intermediate server systems. For each system that is a DB2 system, collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.

For non-DB2 systems, refer to the documentation specific to those products for diagnostic procedures.

If any dumps were generated on any DB2 system participating in processing the remote request, collect the following diagnostic items:

- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.
- All dumps created by this failure.

00D35E4A

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. An invalid CNNTKN length was sent on a SYNCLOG object.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

00D35E1B

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.

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: Refer to *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

- Statistics Class 4 trace record for the LUWID associated with the failing request.

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00D35D23

Explanation: DB2 has detected an error while parsing a DDM RDBCMM or RDBRLLBCK command received from a remote requester. The value of the DDM enumerated scalar RLSCONV 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 remote requester.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *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 DSNL032I message. For the DB2 system generating the DSNL032I message, collect the following diagnostic items:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

In addition, identify all connected systems participating in the processing of the remote request. This includes the requester system to which the application is connected and the data server which is the target of the remote request. This may also include intermediate server systems. For each system that is a DB2 system, collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.

For non-DB2 systems, refer to the documentation specific to those products for diagnostic procedures.

If any dumps were generated on any DB2 system participating in processing the remote request, collect the following diagnostic items:

- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.
- All dumps created by this failure.

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.

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: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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 the section entitled "Data organization" of *Diagnosis Guide and Reference* for details of floating point range.

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

* Statistics Class 4 trace record for the LUWID associated with the failing request.

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00D35C26

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 command is less than the sum of the lengths of the constituent instance variables appearing as parameters.

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: Refer to *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:

* Statistics Class 4 trace record for the LUWID associated with the failing request.

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At this DB2 remote server, collect the following diagnostic items listed in

* 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.
* All dumps taken by the attachment facility or requesting application.

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 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.

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: Refer to *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

* Statistics Class 4 trace record for the LUWID associated with the failing request.

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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, PKGATHOPT, 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) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:

* Statistics Class 4 trace record for the LUWID associated with the failing request.

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At this DB2 remote server, collect the following diagnostic items listed in

* 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.
* All dumps taken by the attachment facility or requesting application.

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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.

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: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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 the section entitled "Data organization" of *Diagnosis Guide and Reference* for details of floating point range.

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

* Statistics Class 4 trace record for the LUWID associated with the failing request.

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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.

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 Part 2 of *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:

* Statistics Class 4 trace record for the LUWID associated with the failing request.

For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items:

* 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.
* All dumps taken by the attachment facility or requesting application.

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.

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 Part 2 of *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:

* Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

* 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.
* All dumps taken by the attachment facility or requesting application.

00D35C2F

Explanation: DB2 has detected an error while parsing a DDM BGNBND, REBIND, BNDCPY, BNDDPLY command received from a remote requester. The DDM object PKGOWNID has the length more than 128 bytes.

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for more information.

A DDM reply message (VALNSPRM) is returned to the remote requester.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *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 DSNL032I message. For the DB2 system generating the DSNL032I message, collect the following diagnostic items:

* Statistics Class 4 trace record for the LUWID associated with the failing request.

In addition, identify all connected systems participating in the processing of the remote request. This includes the requester system to which the application is connected and the data server which is the target of the remote request. This may also include intermediate server systems. For each system that is a DB2 system, collect the following diagnostic items:

* Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.

For non-DB2 systems, refer to the documentation specific to those products for diagnostic procedures.

If any dumps were generated on any DB2 system participating in processing the remote request, collect the following diagnostic items:

* Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.
* All dumps created by this failure.

00D35E5F

Explanation: Acting as a requester or a server, DB2 has detected an error while parsing a DRDA early descriptor object. The descriptor for the object indicates that additional group data is to be parsed, but the object length is too small to contain the additional group data.

System action: An alert is generated and message DSNL031I (if the error is detected by DB2 acting as a requester) or message DSNL032I (if the error is detected by DB2 acting as a server) 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 Part 2 of *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 or DSNL032I message.

For the DB2 system generating the DSNL031I or

DSNL032I message, collect the following diagnostic items:

* Statistics Class 4 trace record for the LUWID associated with the failing request.

In addition, identify all connected systems participating in the processing of the remote request. This includes the requester system to which the application is connected and the data server which is the target of the remote request. This may also include intermediate server systems. For each system that is a DB2 system, collect the following diagnostic items:

* Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.

For non-DB2 systems, refer to the documentation specific to those products for diagnostic procedures.

If any dumps were generated on any DB2 system participating in processing the remote request, collect the following diagnostic items:

* Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.
* All dumps created by this failure.

00D35B17

Explanation: Acting as a DRDA server, DB2 has detected an error while parsing an SQLDTA object. While parsing the SQLDTAGRP late group descriptor contained within the SQLDTA object, the length override value in one of the constituent SQLDTAGRP SDAs contains a placeholder length value, but the placeholder length value is an allowable value. The descriptor is invalid.

System action: The system generates an alert and returns message DSNL032I. Refer to the description of this message for further information.

A DSCINVRM reply message is returned to the requester.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *Utility Guide and Reference* for information on identifying and reporting the problem.

Problem determination: You should analyze the statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message.

At the DB2 for z/OS DRDA server, collect the following diagnostic items:

* SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
* Statistics Class 4 trace record for the LUWID associated with the failing request.

If the requester is a DB2 for z/OS system, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

00D35D1F

Explanation: DB2 has detected an error while parsing a DDM CNTQRY command received from a DRDA requester. The value of the QRYROWSET instance value is zero, but the the minimum defined value for this instance variable on a CNTQRY command is one.

System action: DB2 generates an alert, and writes message DSNL032I to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the DRDA requester.

Operator response: Notify the System Programmer.

System programmer response: Refer to *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.

If the DRDA requester is also a DB2 for OS/390 system, then at the requester DB2 system, collect the following diagnostic items:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

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At this remote server, collect the following diagnostic items:

- All dumps taken by the attachment facility or requesting application.

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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.

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: Refer to *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

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At this DB2 remote server, collect the following diagnostic items listed in

- 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.
- All dumps taken by the attachment facility or requesting application.

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00D35E6D

Explanation: DB2 has detected an error while parsing a DDM SNDPKT command received from a remote requester. The SNDPKT command contains an invalid RDBNAM instance variable value that is not supported. DB2 only accepts up to 16 characters.

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 remote requester.

Operator response: Notify the system programmer.

System programmer response: This is most likely an error at the remote requester system. If you suspect an error in DB2, refer to Part 2 of the 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 DSNL032I message. For the DB2 system generating the DSNL032I message, collect the following diagnostic items:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

In addition, identify all connected systems participating in the processing of the remote request. This includes the requester system to which the application is connected and the data server which is the target of the remote request. This may also include intermediate

server systems. For each system that is a DB2 system, collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.

For non-DB2 systems, refer to the documentation specific to those products for diagnostic procedures.

If any dumps were generated on any DB2 system participating in processing the remote request, collect the following diagnostic items:

- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.
- All dumps created by this failure.

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.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

00D35E1C

Explanation: DB2, acting as a DRDA client, has detected an error in a 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.

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: Refer to *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

- Statistics Class 4 trace record for the LUWID associated with the failing request.

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00D35E62

Explanation: DB2 detected an error in a DDM command or DDM command data. An invalid interrupt token was sent on an INTRDBRQS command.

System action: A DDM reply message (SYNTAXRM or INTTKNRM) is returned to the DRDA client. INTTKNRM is returned if the client is not authorized to interrupt an SQL statement or the token length is not 30 bytes. In all other cases, SYNTAXRM is returned.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *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 local DB2, collect the following diagnostic item:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At the remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

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00D35C19

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, RDBNAM, are other than blank. While DDM defines

the length of RDBNAM to be 18 bytes, DB2 supports only a 16 byte RDBNAM.

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: Refer to *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:

*   Statistics Class 4 trace record for the LUWID associated with the failing request.

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At this DB2 remote server, collect the following diagnostic items listed in

*   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.
*   All dumps taken by the attachment facility or requesting application.

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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 FRCSNGROW. The local DB2 may not specify LMTBLKPRC or SNGROWPRC as values of QRYBLKCTL as an OPNQRY parameter.

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: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

At this local DB2, collect the following diagnostic items:

*   Statistics Class 4 trace record for the LUWID associated with the failing request.

.

At this DB2 remote server, collect the following diagnostic items listed in

*   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.
*   All dumps taken by the attachment facility or requesting application.

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00D35E76

Explanation: DB2 has detected an error while parsing a DDM SECCHK command received from a remote client. The SECCHK command contains an invalid USRORGID instance variable value that is not supported. The value must be 1024 bytes or less.

System action: A DDM reply message (SYNTAXRM) is returned to the DRDA client.

Operator response: Notify the system programmer.

System programmer response: This is most likely an error at the remote client system. If you suspect an error in DB2, refer to Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: You should analyze the statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message.

At the local DB2, collect the diagnostic items:

*   SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
*   Statistics Class 4 trace record for the LUWID associated with the failing request.

If the remote client system, collect the diagnostic items:

*   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.
*   All dumps taken by the attachment facility or requesting application.

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 BNDOPTVL scalar. This 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 (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 Part 2 of *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 DSNL032I message.

If the remote DRDA client is a DB2 for MVS system, at the DB2 DRDA client, collect the following diagnostic items:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

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.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

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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.

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 Part 2 of *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 DSNL032I message.

At this local DB2, collect the following diagnostic items:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this DB2 remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

00D35A03

Explanation: DB2 has detected an error while parsing a DDM command data object received from a remote requester. The DDM object is either an SQLSTT, SQLOBJNAM, or SQLSTTVRB. The DDM extended length field required to support these objects 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.

00D35E1D • 00D35E39

A DDM reply message (SYNTAXRM) is returned to the remote requester.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *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 DSNL032I message. For the DB2 system generating the DSNL032I message, collect the following diagnostic items:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

In addition, identify all connected systems participating in the processing of the remote request. This includes the requester system to which the application is connected and the data server which is the target of the remote request. This may also include intermediate server systems. For each system that is a DB2 system, collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.

For non-DB2 systems, refer to the documentation specific to those products for diagnostic procedures.

If any dumps were generated on any DB2 system participating in processing the remote request, collect the following diagnostic items:

- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.
- All dumps created by this failure.

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.

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: Refer to *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

- Statistics Class 4 trace record for the LUWID associated with the failing request.

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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.

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 Part 2 of *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 DSNL032I message.

At this local DB2, collect the following diagnostic items:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this DB2 remote server, collect the following diagnostic items listed in

- 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.
- All dumps taken by the attachment facility or requesting application.

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.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

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.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

00D35C21

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.

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: Refer to *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

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At this DB2 remote server, collect the following diagnostic items listed in

- 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.
- All dumps taken by the attachment facility or requesting application.

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00D35B0D

Explanation: Acting as a DRDA server, DB2 has detected an error while parsing an SQLDTA object. The FDOCA geometry for an SQLDTAGRP late group descriptor, contained within the DRDA SQLDTA late descriptor, is incorrect. The SQLDTAGRP triplet is not defined as an FD:OCA nullable group. The descriptor is invalid.

System action: The system generates an alert and returns message DSNL032I. Refer to the description of this message for further information.

A DSCINVRM reply message is returned to the requester.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *Utility Guide and Reference* for information on identifying and reporting the problem.

Problem determination: You should analyze the statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message.

At the DB2 for z/OS DRDA server, collect the following diagnostic items:

- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.

- Statistics Class 4 trace record for the LUWID associated with the failing request.

If the requester is a DB2 for z/OS system, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

00D35E41

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. An invalid RLSCONV length was sent on a SYNCCTL command.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

00D35D16

Explanation: DB2 has detected an error while parsing a DDM command received from a local DB2. The length of an instance variable received as a command parameter exceeds the length of the instance variable, as specified by DDM Level 3.

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 Part 2 of *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 DSNL032I message.

At this local DB2, collect the following diagnostic items:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this DB2 remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

00D35B0B

Explanation: Acting as a DRDA server, DB2 has detected an error while parsing an SQLDTA object in array format. In this case, the SQLDTA is a DDM collection consisting of FDODSC, FDOEXT, FDODTA, and FDOOFF scalars. The last scalar within the SQLDTA is other than the FDOOFF. This procedure is invalid.

System action: The system generates an alert and returns message DSNL032I. Refer to the description of this message for further information.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *Utility Guide and Reference* for information on identifying and reporting the problem.

Problem determination: You should analyze the statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message.

At the DB2 for z/OS DRDA server, collect the following diagnostic items:

- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Statistics Class 4 trace record for the LUWID associated with the failing request.

If the requester is a DB2 for z/OS system, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

00D35B16

Explanation: Acting as a DRDA server, DB2 has detected an error while parsing an SQLDTA object. While parsing the SQLDTAGRP late group descriptor contained within the SQLDTA object, the local identifier (LID) of one of the SQLDTAGRP constituent triplets was not previously defined by a late environmental descriptor and the LID is outside of the bounds of the default environmental descriptor LIDs. Note that the default LIDs are identical to the DRDA types. The descriptor is invalid.

System action: The system generates an alert and returns message DSNL032I. Refer to the description of this message for further information.

A DSCINVRM reply message is returned to the requester.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *Utility Guide and Reference* for information on identifying and reporting the problem.

Problem determination: You should analyze the statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message.

At the DB2 for z/OS DRDA server, collect the following diagnostic items:

- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Statistics Class 4 trace record for the LUWID associated with the failing request.

If the requester is a DB2 for z/OS system, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

00D35C22

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, STTSTRDEL, 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) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

.

At this DB2 remote server, collect the following diagnostic items listed in

- 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.
- All dumps taken by the attachment facility or requesting application.

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00D35C1B

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, PKGRPLOPT, 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) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

.

At this DB2 remote server, collect the following diagnostic items listed in

- 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.
- All dumps taken by the attachment facility or requesting application.

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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.

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 remote DRDA client.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

. For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

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00D300F8

Explanation: An attempt was made to access data at a remote location that has been started in restricted access mode. When a DB2 system is started in restricted access mode, no remote inbound or outbound access is allowed.

System action: Remote access is not allowed.

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 and/or the local DB2 has been restarted in full access mode.

00D35B03

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 length of the FDODSC scalar exceeds 32KB, however, the format of the DDM extended length 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 (SYNTAXRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

.

At this DB2 remote server, collect the following diagnostic items listed in

- 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.
- All dumps taken by the attachment facility or requesting application.

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00D35D27

Explanation: DB2 has detected an error while parsing a DDM GETNXTCHK command received from a remote requester. The value of the DDM enumerated scalar FREREFOPT 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 remote requester.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *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 DSNL032I message. For the DB2 system generating the DSNL032I message, collect the following diagnostic items:

• Statistics Class 4 trace record for the LUWID associated with the failing request.

In addition, identify all connected systems participating in the processing of the remote request. This includes the requester system to which the application is connected and the data server which is the target of the remote request. This may also include intermediate server systems. For each system that is a DB2 system, collect the following diagnostic items:

• Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.

For non-DB2 systems, refer to the documentation specific to those products for diagnostic procedures.

If any dumps were generated on any DB2 system participating in processing the remote request, collect the following diagnostic items:

• Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.
• All dumps created by this failure.

00D35D08

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 PRPSQLSTT command.

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: Refer to *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:

• Statistics Class 4 trace record for the LUWID associated with the failing request.

.

At this DB2 remote server, collect the following diagnostic items listed in

• 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.
• All dumps taken by the attachment facility or requesting application.

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00D35D12

Explanation: DB2 has detected an error while parsing a DDM command received from a local DB2. The value of the DDM scalar, QRYBLKSZ, contained as a parameter on a DDM OPNQRY, CNTQRY, or EXCSQLSTT command, is invalid.The value of QRYBLKSZ must be between 512 and 32767, inclusive.

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 Part 2 of *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 DSNL032I message.

At this local DB2, collect the following diagnostic items:

• Statistics Class 4 trace record for the LUWID associated with the failing request.

At this DB2 remote server, collect the following diagnostic items:

• 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.
• All dumps taken by the attachment facility or requesting application.

00D35E29

Explanation: DB2, acting as a DRDA client, has detected an error in a zoned decimal data field (nullable or non-nullable). DB2 has detected a numeric conversion error, preventing the data from being converted to packed decimal format.

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: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00D35C2E • 00D35C06

User response: Check the numeric data.

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

- Statistics Class 4 trace record for the LUWID associated with the failing request.

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00D35C2E

Explanation: DB2 detected an error in a DDM BGNBND command received from a remote requester. The value of the enumerated scalar, PRPSTTKP, is invalid.

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for more information.

A DDM reply message (VALNSPRM) is returned to the remote requester.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *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 DSNL032I message. For the DB2 system generating the DSNL032I message, collect the following diagnostic items:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

In addition, identify all connected systems participating in the processing of the remote request. This includes the requester system to which the application is connected and the data server which is the target of the remote request. This may also include intermediate server systems. For each system that is a DB2 system, collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.

For non-DB2 systems, refer to the documentation specific to those products for diagnostic procedures.

If any dumps were generated on any DB2 system participating in processing the remote request, collect the following diagnostic items:

- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.
- All dumps created by this failure.

00D35E3D

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 DDM level 6b length field is invalid.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

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.

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: Refer to *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

.

At this DB2 remote server, collect the following diagnostic items listed in

- 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.
- All dumps taken by the attachment facility or requesting application.

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00D35E7A

Explanation: DB2 acts as a DRDA intermediate server passing input data to another DRDA server. It has detected an error in an SQLDTA object received from a DRDA requester system. The SQLDTA object length value computed from parsing the DDM constituents of the SQLDTA object is smaller than the stated length of the SQLDTA object.

System action: The system generates an alert and returns message DSNL032I. Refer to the description of this message for further information.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *Utility Guide and Reference* for information on identifying and reporting the problem.

Problem determination: You should analyze the statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message.

At the DB2 for z/OS DRDA server, collect the following diagnostic items:

- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Statistics Class 4 trace record for the LUWID associated with the failing request.

If the requester is a DB2 for z/OS system, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

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.

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: Refer to *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

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At this DB2 remote server, collect the following diagnostic items listed in

- 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.
- All dumps taken by the attachment facility or requesting application.

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00D35E5D

Explanation: Acting as a requester or a server, DB2 has detected an error while parsing a DRDA object. The final length computed by parsing the object using its descriptor is larger than the stated length of the object itself.

System action: An alert is generated and message DSNL031I (if the error is detected by DB2 acting as a requester) or message DSNL032I (if the error is detected by DB2 acting as a server) 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 Part 2 of *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 DSNL032I message. For the DB2 system generating the DSNL032I message, collect the following diagnostic items:

| • Statistics Class 4 trace record for the LUWID
| associated with the failing request.

| In addition, identify all connected systems participating
| in the processing of the remote request. This includes
| the requester system to which the application is
| connected and the data server which is the target of the
| remote request. This may also include intermediate
| server systems. For each system that is a DB2 system,
| collect the following diagnostic items:

| • Console output and the listing of the SYSLOG data
| set from each connected site for the period of time
| spanning the failure.

| For non-DB2 systems, refer to the documentation
| specific to those products for diagnostic procedures.

| If any dumps were generated on any DB2 system
| participating in processing the remote request, collect
| the following diagnostic items:

| • Listings of the SYS1.LOGREC data set, obtained by
| executing IFCEREP1 at each connected site.

| • All dumps created by this failure.

| **00D35E79**

| **Explanation:** DB2 acts as a DRDA intermediate server
| passing input data to another DRDA server. It has
| detected an error in an SQLDTA object received from a
| DRDA requester system. The SQLDTA object length
| value computed from parsing the DDM constituents of
| the SQLDTA object is larger than the stated length of
| the SQLDTA object.

| **System action:** The system generates an alert and
| returns message DSNL032I. Refer to the description of
| this message for further information.

| **System programmer response:** If you suspect an error
| in DB2, refer to Part 2 of *Utility Guide and Reference* for
| information on identifying and reporting the problem.

| **Problem determination:** You should analyze the
| statistics class 4 trace record identified by the IFCID
| sequence number enumerated in the DSNL032I
| message.

| At the DB2 for z/OS DRDA server, collect the
| following diagnostic items:

| • SVC dump (or system dump), taken to
| SYS1.DUMPxx data set, as result of an
| operator-initiated dump command or SLIP trap exit.

| • Statistics Class 4 trace record for the LUWID
| associated with the failing request.

| If the requester is a DB2 for z/OS system, collect the
| following diagnostic items:

| • 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.

| • All dumps taken by the attachment facility or
| requesting application.

| **00D35E6A**

| **Explanation:** DB2 has detected an error while parsing
| a DDM SNDPKT command received from a remote
| requester. The SNDPKT command contains a
| RESPKTSZ instance variable value that is not
| supported. The value must be 32767 or less.

| **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
| remote requester.

| **Operator response:** Notify the system programmer.

| **System programmer response:** This is most likely an
| error at the remote requester system. If you suspect an
| error in DB2, refer to Part 2 of the 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 DSNL032I message. For the DB2
| system generating the DSNL032I message, collect the
| following diagnostic items listed in

| • Statistics Class 4 trace record for the LUWID
| associated with the failing request.

| In addition, identify all connected systems participating
| in the processing of the remote request. This includes
| the requester system to which the application is
| connected and the data server which is the target of the
| remote request. This may also include intermediate
| server systems. For each system that is a DB2 system,
| collect the following diagnostic items:

| • Console output and the listing of the SYSLOG data
| set from each connected site for the period of time
| spanning the failure.

| For non-DB2 systems, refer to the documentation
| specific to those products for diagnostic procedures.

| If any dumps were generated on any DB2 system
| participating in processing the remote request, collect
| the following diagnostic items:

| • Listings of the SYS1.LOGREC data set, obtained by
| executing IFCEREP1 at each connected site.

| • All dumps created by this failure.

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.

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: Refer to *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

.

At this DB2 remote server, collect the following diagnostic items listed in

- 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.
- All dumps taken by the attachment facility or requesting application.

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00D35E71

Explanation: DB2 has detected an error while parsing a DDM ACCSEC command received from a remote requester. The ACCSEC command contains an invalid ENCKEYLEN instance variable - the value must be 2 bytes.

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) is returned to the remote requester.

Operator response: Notify the system programmer.

System programmer response: This is most likely an error at the remote requester system. If you suspect an error in DB2, refer to Part 2 of the 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 DSNL032I message. For the DB2 system generating the DSNL032I message, collect the following diagnostic items:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

In addition, identify all connected systems participating in the processing of the remote request. This includes the requester system to which the application is connected and the data server which is the target of the remote request. This may also include intermediate server systems. For each system that is a DB2 system, collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.

For non-DB2 systems, refer to the documentation specific to those products for diagnostic procedures.

If any dumps were generated on any DB2 system participating in processing the remote request, collect the following diagnostic items:

- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.
- All dumps created by this failure.

00D300F3

Explanation: The connection to the remote server failed. The SYSIBM.USERNAMES table did not contain an outbound row and did not specify the remote authorization ID for the new user primary DB2 authorization ID. When the USERNAMES column in SYSIBM.LUNAMES or SYSIBM.IPNAMES is specified as 'O' or 'B', outbound name translation is in use. The SYSIBM.USERNAMES table must contain entries that describe the remote authorization IDs that are used for each DB2 authorization ID that communicates with the LU or the TCP/IP address.

System action: A response is sent to the application to indicate that the resource is unavailable. 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 or SYSIBM.IPNAMES is specified correctly for the indicated LUNAME or IPADDR. If you intend to use remote authorization IDs that differ from the DB2 authorization IDs, verify that the SYSIBM.USERNAMES table has rows that 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: Analyze the SYSIBM.USERNAMES table for an incorrect or missing entry.

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.

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: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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 the section entitled "Data organization" of *Diagnosis Guide and Reference* for details of floating point range.

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

- Statistics Class 4 trace record for the LUWID associated with the failing request.

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00D35A01

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. The instantiation of both the SBCS and mixed data SDAs has been sent. This 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 (DTAMCHRM) 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 Part 2 of *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 DSNL032I message.

At this local DB2, collect the following diagnostic items:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this DB2 remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

00D35C31

Explanation: DB2 has detected an error while parsing a DDM DRPPKG command received from a remote requester. DB2 has received a wild card PKGIDANY instance variable, but neither RDBCOLIDANY nor COLID is received. When PKGIDANY is present, RDBCOLIDANY or COLID must be specified. The request is invalid.

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for more information.

A DDM reply message (VALNSPRM) is returned to the remote requester.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *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 DSNL032I message. For the DB2 system generating the DSNL032I message, collect the following diagnostic items:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

In addition, identify all connected systems participating in the processing of the remote request. This includes the requester system to which the application is connected and the data server which is the target of the remote request. This may also include intermediate server systems. For each system that is a DB2 system, collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.

For non-DB2 systems, refer to the documentation specific to those products for diagnostic procedures.

If any dumps were generated on any DB2 system participating in processing the remote request, collect the following diagnostic items:

| • Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.
| • All dumps created by this failure.

00D35D15

Explanation: DB2 has detected an error while parsing a DDM command received from a local DB2. The length of the DDM command is less than the sum of the lengths of all constituent instance variables.

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 Part 2 of *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:

• Statistics Class 4 trace record for the LUWID associated with the failing request.

At this DB2 remote server, collect the following diagnostic items:

• 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.
• All dumps taken by the attachment facility or requesting application.

00D35E0E

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 sum of the lengths of the constituent DDM objects within an OBJDSS is inconsistent with the length of the DSS carrier.

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 Part 2 of *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.

At this local DB2, collect the following diagnostic items:

• Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

• 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.
• All dumps taken by the attachment facility or requesting application.

00D35E28

Explanation: DB2, acting as a DRDA client, has detected an error in a nullable 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.

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: Refer to *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

• Statistics Class 4 trace record for the LUWID associated with the failing request.

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00D35B08

Explanation: DB2 has detected an error while parsing an SQLDTA command data object received from a local DB2. The SQLDTA FDOCA descriptor, contained within the FDODSC scalar, has been validated. The length of the FDODTA scalar, containing the host variable data, exceeds 32KB, however, the format of the DDM 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 DDM reply message (SYNTAXRM) will be returned to the local DB2.

00D35D01 • 00D35C34

Operator response: Notify the system programmer.

System programmer response: Refer to *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:

* Statistics Class 4 trace record for the LUWID associated with the failing request.

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At this DB2 remote server, collect the following diagnostic items listed in

* 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.
* All dumps taken by the attachment facility or requesting application.

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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, DSCRDBTBL, DSCSQLSTT, or EXCSQLIMM.

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: Refer to *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:

* Statistics Class 4 trace record for the LUWID associated with the failing request.

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At this DB2 remote server, collect the following diagnostic items listed in

* 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.

* All dumps taken by the attachment facility or requesting application.

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00D35C34

Explanation: DB2 has detected an error while parsing a DDM DRPPKG command received from a remote requester. DB2 received both the VRSNAMANY instance variable and the VRSNAM instance variable in the DDM DRPPKG command. VRSNAMANY and VRSNAM are mutually exclusive. This 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 (SYNTAXRM) is returned to the remote requester.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *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 DSNL032I message. For the DB2 system generating the DSNL032I message, collect the following diagnostic items:

* Statistics Class 4 trace record for the LUWID associated with the failing request.

In addition, identify all connected systems participating in the processing of the remote request. This includes the requester system to which the application is connected and the data server which is the target of the remote request. This may also include intermediate server systems. For each system that is a DB2 system, collect the following diagnostic items:

* Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.

For non-DB2 systems, refer to the documentation specific to those products for diagnostic procedures.

If any dumps were generated on any DB2 system participating in processing the remote request, collect the following diagnostic items:

* Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.
* All dumps created by this failure.

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.

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 Part 2 of *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:

* Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

* 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.
* All dumps taken by the attachment facility or requesting application.

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.

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: Refer to *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

* Statistics Class 4 trace record for the LUWID associated with the failing request.

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00D35E4F

Explanation: DB2 has detected an error while parsing an SQLSTT object for an EXCSQLSET command received from a remote requester. The SQLSTT object length is too small for a SET statement.

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 requester. 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 Part 2 of *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 DSNL032I message. For the DB2 system generating the DSNL032I message, collect the following diagnostic items:

* Statistics Class 4 trace record for the LUWID associated with the failing request.

In addition, identify all connected systems participating in the processing of the remote request. This includes the requester system to which the application is connected and the data server which is the target of the remote request. This may also include intermediate server systems. For each system that is a DB2 system, collect the following diagnostic items:

* Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.

For non-DB2 systems, refer to the documentation specific to those products for diagnostic procedures.

If any dumps were generated on any DB2 system participating in processing the remote request, collect the following diagnostic items:

* Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.
* All dumps created by this failure.

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.

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: Refer to *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

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At this DB2 remote server, collect the following diagnostic items listed in

- 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.
- All dumps taken by the attachment facility or requesting application.

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00D35E20

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.

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: Refer to *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

- Statistics Class 4 trace record for the LUWID associated with the failing request.

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00D35E52

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 SQLCADTA row (RLO) MDD is either invalid or has not been included within the SQLDTARD descriptor. The descriptor 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 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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

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.

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: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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 the section entitled "Data organization" of *Diagnosis Guide and Reference* for details of floating point range.

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

- Statistics Class 4 trace record for the LUWID associated with the failing request.

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00D35E67

Explanation: DB2 has detected an error while parsing a DDM SNDPKT command received from a remote requester. The SNDPKT command contains an invalid instance variable code point.

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) is returned to the remote requester.

Operator response: Notify the system programmer.

System programmer response: This is most likely an error at the remote requester system. If you suspect an error in DB2, refer to Part 2 of the 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 DSNL032I message. For the DB2 system generating the DSNL032I message, collect the following diagnostic items:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

In addition, identify all connected systems participating in the processing of the remote request. This includes the requester system to which the application is connected and the data server which is the target of the remote request. This may also include intermediate server systems. For each system that is a DB2 system, collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.

For non-DB2 systems, refer to the documentation specific to those products for diagnostic procedures.

If any dumps were generated on any DB2 system participating in processing the remote request, collect the following diagnostic items:

- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.
- All dumps created by this failure.

00D35E63

Explanation: DB2 detected an error in a DDM command or DDM command data. An invalid RDBNAM length was sent on an INTRDBRQS command.

System action: If the length of the RDBNAM is greater than 255 (if client supports long names) or greater than 18 (if client does not support long names), 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 Part 2 of *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 local DB2, collect the following diagnostic item:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At the remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

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00D35C2A

Explanation: DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from the local DB2. The value of MAXSCTNBR received on the ENDBND command is invalid. The value must be within the range 1 to 32767 inclusive.

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 Part 2 of *Utility 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.

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.

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: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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 the section entitled "Data organization" of *Diagnosis Guide and Reference* for details of floating point range.

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

- Statistics Class 4 trace record for the LUWID associated with the failing request.

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00D35E72

Explanation: Acting as a server, DB2 has detected an error while parsing an SQLSTT object. The data portion of the object has a length that is smaller than the minimum size of 4 bytes. The first four bytes of the data portion contains the length of the SQL statement.

System action: An alert is generated and message

DSNL032I 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 Part 2 of *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 DSNL032I message. For the DB2 system generating the DSNL032I message, collect the following diagnostic items:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

In addition, identify all connected systems participating in the processing of the remote request. This includes the requester system to which the application is connected and the data server which is the target of the remote request. This may also include intermediate server systems. For each system that is a DB2 system, collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.

For non-DB2 systems, refer to the documentation specific to those products for diagnostic procedures.

If any dumps were generated on any DB2 system participating in processing the remote request, collect the following diagnostic items:

- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.
- All dumps created by this failure.

00D35E6F

Explanation: DB2 has detected an error while parsing a DDM SYNCCTL command received from a remote requester. The SYNCCTL command contains an invalid TIMEOUT instance variable - the value must be 16 bytes.

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) is returned to the remote requester.

Operator response: Notify the system programmer.

System programmer response: This is most likely an error at the remote requester system. If you suspect an error in DB2, refer to Part 2 of the 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 DSNL032I message. For the DB2 system generating the DSNL032I message, collect the following diagnostic items:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

In addition, identify all connected systems participating in the processing of the remote request. This includes the requester system to which the application is connected and the data server which is the target of the remote request. This may also include intermediate server systems. For each system that is a DB2 system, collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.

For non-DB2 systems, refer to the documentation specific to those products for diagnostic procedures.

If any dumps were generated on any DB2 system participating in processing the remote request, collect the following diagnostic items:

- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.
- All dumps created by this failure.

00D35E5E

Explanation: Acting as a requester or a server, DB2 has detected an error while parsing a DRDA early descriptor object. The descriptor for the object indicates that additional nullable group data is to be parsed, but the object length is too small to contain the group null indicator.

System action: An alert is generated and message DSNL031I (if the error is detected by DB2 acting as a requester) or message DSNL032I (if the error is detected by DB2 acting as a server) 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 Part 2 of *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 or DSNL032I message.

For the DB2 system generating the DSNL031I or DSNL032I message, collect the following diagnostic items:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

In addition, identify all connected systems participating in the processing of the remote request. This includes the requester system to which the application is connected and the data server which is the target of the remote request. This may also include intermediate server systems. For each system that is a DB2 system, collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.

For non-DB2 systems, refer to the documentation specific to those products for diagnostic procedures.

If any dumps were generated on any DB2 system participating in processing the remote request, collect the following diagnostic items:

- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.
- All dumps created by this failure.

00D35E6C

Explanation: DB2 has detected an error while parsing a DDM SNDPKT command received from a remote requester. The SNDPKT command contains an invalid RDBNAM instance variable. Long variable name support has not been negotiated and the RDBNAM value must be 18 bytes.

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) is returned to the remote requester.

Operator response: Notify the system programmer.

System programmer response: This is most likely an error at the remote requester system. If you suspect an error in DB2, refer to Part 2 of the 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 DSNL032I message. For the DB2 system generating the DSNL032I message, collect the following diagnostic items:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

In addition, identify all connected systems participating in the processing of the remote request. This includes the requester system to which the application is connected and the data server which is the target of the remote request. This may also include intermediate server systems. For each system that is a DB2 system, collect the following diagnostic items:

| • Console output and the listing of the SYSLOG data
| set from each connected site for the period of time
| spanning the failure.

| For non-DB2 systems, refer to the documentation
| specific to those products for diagnostic procedures.

| If any dumps were generated on any DB2 system
| participating in processing the remote request, collect
| the following diagnostic items:
| • Listings of the SYS1.LOGREC data set, obtained by
| executing IFCEREP1 at each connected site.
| • All dumps created by this failure.

00D35C23

Explanation: DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from the local DB2. The value of the DDM enumerated scalar, STTTIMFMT, 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) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:
• Statistics Class 4 trace record for the LUWID associated with the failing request.

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At this DB2 remote server, collect the following diagnostic items listed in
• 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.
• All dumps taken by the attachment facility or requesting application.

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00D35D1E

Explanation: DB2 detected an error while parsing a DDM command received from a DRDA requester. The value of the QRYROWSET instance variable on an OPNQRY or CNTQRY command is less than zero. The

minimum defined value for this instance variable is zero.

System action: DB2 generates an alert, and writes message DSNL032I to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the DRDA requester.

Operator response: Notify the System Programmer.

System programmer response: Refer to *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.

If the DRDA requester is also a DB2 for OS/390 system, then at the requester DB2 system, collect the following diagnostic items:
• Statistics Class 4 trace record for the LUWID associated with the failing request.

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At this remote server, collect the following diagnostic items:
• All dumps taken by the attachment facility or requesting application.

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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.

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: Refer to *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
• Statistics Class 4 trace record for the LUWID associated with the failing request.

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00D35D03

Explanation: DB2 has detected an error while parsing a DDM command received from a local DB2. The value of the DDM OUTEXP enumerated value instance variable, contained within a DDM EXCSQLSTT command, is other than FALSE (X'F0') or TRUE (X'F1').

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: Refer to *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:
- Statistics Class 4 trace record for the LUWID associated with the failing request.

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At this DB2 remote server, collect the following diagnostic items listed in
- 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.
- All dumps taken by the attachment facility or requesting application.

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00D35E3E

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.

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 Part 2 of *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:
- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:
- 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.
- All dumps taken by the attachment facility or requesting application.

00D35E60

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. An invalid XID length was received on a SYNCCTL command sent by a remote requester.

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) is returned to the remote requester.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *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 DSNL032I message. For the DB2 system generating the DSNL032I message, collect the following diagnostic items:
- Statistics Class 4 trace record for the LUWID associated with the failing request.

In addition, identify all connected systems participating in the processing of the remote request. This includes the requester system to which the application is connected and the data server which is the target of the remote request. This may also include intermediate server systems. For each system that is a DB2 system, collect the following diagnostic items:
- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.

For non-DB2 systems, refer to the documentation specific to those products for diagnostic procedures.

If any dumps were generated on any DB2 system participating in processing the remote request, collect the following diagnostic items:
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.
- All dumps created by this failure.

00D35C30

Explanation: DB2 has detected an error while parsing a DDM DRPPKG command received from a remote requester. DB2 has received a wild card instance variable RDBCOLIDANY, but neither instance variable PKGIDANY nor instance variable PKGID is received. When RDBCOLIDANY is present, PKGIDANY or PKGID must be specified. The request is invalid.

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for more information.

A DDM reply message (VALNSPRM) is returned to the remote requester.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *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 DSNL032I message. For the DB2 system generating the DSNL032I message, collect the following diagnostic items:

* Statistics Class 4 trace record for the LUWID associated with the failing request.

In addition, identify all connected systems participating in the processing of the remote request. This includes the requester system to which the application is connected and the data server which is the target of the remote request. This may also include intermediate server systems. For each system that is a DB2 system, collect the following diagnostic items:

* Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.

For non-DB2 systems, refer to the documentation specific to those products for diagnostic procedures.

If any dumps were generated on any DB2 system participating in processing the remote request, collect the following diagnostic items:

* Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.
* All dumps created by this failure.

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.

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 Part 2 of *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:

* Statistics Class 4 trace record for the LUWID associated with the failing request.

For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items:

* 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.
* All dumps taken by the attachment facility or requesting application.

00D35E3A

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. An invalid LOGNAME length was sent on a SYNCLOG object.

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 Part 2 of *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:

* Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

• 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.

• All dumps taken by the attachment facility or requesting application.

00D35E2E

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 BNDOPTVL instance variable is required for this DDM collection but was not received.

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 Part 2 of *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:

• Statistics Class 4 trace record for the LUWID associated with the failing request.

For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items:

• 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.

• All dumps taken by the attachment facility or requesting application.

00D35E5A

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. An invalid NEWPSWD length was sent on a SECCHK command. New passwords cannot exceed 255 bytes.

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 Part 2 of *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:

• Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

• 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.

• All dumps taken by the attachment facility or requesting application.

00D35D0F

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.

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: Refer to *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:

• Statistics Class 4 trace record for the LUWID associated with the failing request.

.

At this DB2 remote server, collect the following diagnostic items listed in

• 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.

• All dumps taken by the attachment facility or requesting application.

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00D35D1A

Explanation: DB2, acting as a DRDA server, has detected an error while parsing a DDM DSCSQLSTT command received from a remote DRDA client. An instance variable, defined as valid by DDM Level 5, but not supported by DB2, has been detected on a DDM DSCSQLSTT command.

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: Refer to *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 OS/390 system, at the DRDA client, collect the following diagnostic items:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

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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.

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: Refer to *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

.

At this DB2 remote server, collect the following diagnostic items listed in

- 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.
- All dumps taken by the attachment facility or requesting application.

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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.

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: Refer to *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

.

At this DB2 remote server, collect the following diagnostic items listed in

- 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.
- All dumps taken by the attachment facility or requesting application.

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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.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

00D35B07

Explanation: DB2 has detected an error while parsing an SQLDTA command data object received from a local DB2. The SQLDTA FDOCA descriptor, contained within the FDODSC scalar, has been validated, however, the FDODTA scalar, containing the host variable data, is not included within the SQLDTA DDM object. This 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 (SYNTAXRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

.

At this DB2 remote server, collect the following diagnostic items listed in

- 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.
- All dumps taken by the attachment facility or requesting application.

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00D35B0E

Explanation: Acting as a DRDA server, DB2 has detected an error while parsing an SQLDTA object. The FDOCA geometry for an SQLDTAGRP late group descriptor, contained within the DRDA SQLDTA late descriptor, is incorrect. The late descriptor includes late environmental descriptors and the SQLDTAGRP meta data definition (MDD) is either invalid or has not been included within the descriptor. The descriptor is invalid.

System action: The system generates an alert and returns message DSNL032I. Refer to the description of this message for further information.

A DSCINVRM reply message is returned to the requester.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *Utility Guide and Reference* for information on identifying and reporting the problem.

Problem determination: You should analyze the statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message.

At the DB2 for z/OS DRDA server, collect the following diagnostic items:

- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Statistics Class 4 trace record for the LUWID associated with the failing request.

If the requester is a DB2 for z/OS system, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

00D35C1C

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, QRYBLKCTL, 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) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

.

At this DB2 remote server, collect the following diagnostic items listed in

- 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.
- All dumps taken by the attachment facility or requesting application.

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00D35C1D

Explanation: DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. Bytes 17 and 18 of the DDM scalar, RDBNAM, are other than blank. While DDM defines the length of RDBNAM to be 18 bytes, DB2 supports only a 16 byte RDBNAM.

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: Refer to *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

.

At this DB2 remote server, collect the following diagnostic items listed in

- 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.
- All dumps taken by the attachment facility or requesting application.

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00D35C20

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.

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: Refer to *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

.

At this DB2 remote server, collect the following diagnostic items listed in

- 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.
- All dumps taken by the attachment facility or requesting application.

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00D35C33

Explanation: DB2 has detected an error while parsing a DDM BNDDPLY command received from a remote requester. An invalid instance variable has been received as a parameter on an BNDDPLY command.

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for more information.

A DDM reply message (PRMNSPRM) is returned to the remote requester.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *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 DSNL032I message. For the DB2 system generating the DSNL032I message, collect the following diagnostic items:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

In addition, identify all connected systems participating in the processing of the remote request. This includes the requester system to which the application is connected and the data server which is the target of the remote request. This may also include intermediate server systems. For each system that is a DB2 system, collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.

For non-DB2 systems, refer to the documentation specific to those products for diagnostic procedures.

If any dumps were generated on any DB2 system participating in processing the remote request, collect the following diagnostic items:

- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.
- All dumps created by this failure.

00D35D10

Explanation: DB2 has detected an error while parsing a DDM command received from a local DB2. The mapped scalar, PKGNAMCSN, is invalid. Bytes 17 and 18 of the DDM scalar RDBNAM, contained within PKGNAMCSN, are other than blank. While DDM Level 3 defines the length of this scalar to be 18 bytes, DB2 supports only a 16 byte RDBNAM.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this DB2 remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

00D35E50

Explanation: DB2 has detected an error while parsing an SQLSTT object for an EXCSQLSET command received from a remote requester. The SQLSTT object length is larger than the maximum length (32K) supported by DB2 for an EXCSQLSET SQLSTT statement string.

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 requester. 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 Part 2 of *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 DSNL032I message. For the DB2 system generating the DSNL032I message, collect the following diagnostic items:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

In addition, identify all connected systems participating in the processing of the remote request. This includes the requester system to which the application is

| connected and the data server which is the target of the
| remote request. This may also include intermediate
| server systems. For each system that is a DB2 system,
| collect the following diagnostic items:

| • Console output and the listing of the SYSLOG data
| set from each connected site for the period of time
| spanning the failure.

| For non-DB2 systems, refer to the documentation
| specific to those products for diagnostic procedures.

| If any dumps were generated on any DB2 system
| participating in processing the remote request, collect
| the following diagnostic items:

| • Listings of the SYS1.LOGREC data set, obtained by
| executing IFCEREP1 at each connected site.
| • All dumps created by this failure.

00D35B06

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. The SQLDTA RLO triplet either specifies a
local identifier (LID) which is different than that
defined in the previously processed SQLDTAGRP late
group descriptor, or specifies a nonzero number of
elements or a replication factor other than 1. The
descriptor 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 (DSCINVRM) will be returned
to the local DB2.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:

• Statistics Class 4 trace record for the LUWID
  associated with the failing request.

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At this DB2 remote server, collect the following
diagnostic items listed in

• 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.

• All dumps taken by the attachment facility or
  requesting application.

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| ### 00D35E69

| **Explanation:** DB2 has detected an error while parsing
| a DDM SNDPKT command received from a remote
| requester. The SNDPKT command contains an invalid
| RESPKTSZ instance variable - the value must be 4
| bytes.

| **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) is returned to the
| remote requester.

| **Operator response:** Notify the system programmer.

| **System programmer response:** This is most likely an
| error at the remote requester system. If you suspect an
| error in DB2, refer to Part 2 of the 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 DSNL032I message. For the DB2
| system generating the DSNL032I message, collect the
| following diagnostic items:

| • Statistics Class 4 trace record for the LUWID
| associated with the failing request.

| In addition, identify all connected systems participating
| in the processing of the remote request. This includes
| the requester system to which the application is
| connected and the data server which is the target of the
| remote request. This may also include intermediate
| server systems. For each system that is a DB2 system,
| collect the following diagnostic items:

| • Console output and the listing of the SYSLOG data
| set from each connected site for the period of time
| spanning the failure.

| For non-DB2 systems, refer to the documentation
| specific to those products for diagnostic procedures.

| If any dumps were generated on any DB2 system
| participating in processing the remote request, collect
| the following diagnostic items:

| • Listings of the SYS1.LOGREC data set, obtained by
| executing IFCEREP1 at each connected site.
| • All dumps created by this failure.

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.

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: Refer to *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

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At this DB2 remote server, collect the following diagnostic items listed in

- 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.
- All dumps taken by the attachment facility or requesting application.

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00D35B0A

Explanation: Acting as a DRDA server, DB2 has detected an error while parsing an SQLDTA object. The SQLDTA object, or one of its constituent members, has an object length indicator less than 8. Its constituent members are listed below:

- FDODSC or FDODTA, in the case of an SQLDTA in non-array format
- FDODSC, FDOEXT, FDODTA, or FDOOFF, in the case of an SQLDTA in array format.

System action: The system generates an alert and returns message DSNL032I. Refer to the description of this message for further information.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *Utility Guide and Reference* for information on identifying and reporting the problem.

Problem determination: You should analyze the statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message.

At the DB2 for z/OS DRDA server, collect the following diagnostic items:

- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.

- Statistics Class 4 trace record for the LUWID associated with the failing request.

If the requester is a DB2 for z/OS system, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

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.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

00D35E1E

Explanation: DB2, acting as a DRDA client, has detected an error in a numeric character data field (nullable or non-nullable). DB2 has detected a numeric conversion error, preventing the data from being converted to packed decimal format.

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: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Check the numeric data.

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

- Statistics Class 4 trace record for the LUWID associated with the failing request.

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00D35E40

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. An invalid SYNCTYPE length was sent on a SYNCCTL command.

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 Part 2 of *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 DSNL032I message.

At this local DB2, collect the following diagnostic item:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

00D300F2

Explanation: EXCSATRD reply received from a remote server indicates an incompatible server.

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.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *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.

User response: Notify the system programmer. Invoke the application after the problem has been corrected.

Problem determination: Determine the server being accessed by inspecting the SQLCODE -30041 message text. Refer to the DDM documentation of the EXCSAT command.

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.

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 Part 2 of *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 DSNL032I message.

At this local DB2, collect the following diagnostic items:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this DB2 remote server, collect the following diagnostic items:

- 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.

- All dumps taken by the attachment facility or requesting application.

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.

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: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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 the section entitled "Data organization" of *Diagnosis Guide and Reference* for details of floating point range.

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

- Statistics Class 4 trace record for the LUWID associated with the failing request.

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00D35E3B

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. An invalid LOGTSTMP length was sent on a SYNCLOG object.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

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.

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: Refer to *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

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At this DB2 remote server, collect the following diagnostic items listed in

- 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.
- All dumps taken by the attachment facility or requesting application.

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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 RDBCMM or RDBRLLBCK command.

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: Refer to *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

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At this DB2 remote server, collect the following diagnostic items listed in

- 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.
- All dumps taken by the attachment facility or requesting application.

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00D300FC

Explanation: You attempted to allocate a resource at a remote site using an invalid name.

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).

System programmer response: If you suspect an error in DB2, refer to Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer. Invoke the application after the problem has been corrected.

Problem determination: Determine the resource being allocated and correct the problem.

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.

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: Refer to *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

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At this DB2 remote server, collect the following diagnostic items listed in

- 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.
- All dumps taken by the attachment facility or requesting application.

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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.

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 Part 2 of *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 DSNL032I message.

At this local DB2, collect the following diagnostic item:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

00D35E4B

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. A required instance variable was not sent on a SYNCLOG object.

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 Part 2 of *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:

*   Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

*   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.
*   All dumps taken by the attachment facility or requesting application.

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.

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 Part 2 of *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:

*   Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

*   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.
*   All dumps taken by the attachment facility or requesting application.

00D35B13

Explanation: Acting as a DRDA server, DB2 has detected an error while parsing an SQLDTA object in an array format. An offset value in FDOOFF scalar object results is invalid and results in a data value location that is not contained within the FDODTA scalar object.

System action: The system generates an alert and returns message DSNL032I. Refer to the description of this message for further information.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *Utility Guide and Reference* for information on identifying and reporting the problem.

Problem determination: You should analyze the statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message.

At the DB2 for z/OS DRDA server, collect the following diagnostic items:

*   SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
*   Statistics Class 4 trace record for the LUWID associated with the failing request.

If the requester is a DB2 for z/OS system, collect the following diagnostic items:

*   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.
*   All dumps taken by the attachment facility or requesting application.

00D35E73

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 data to be parsed is inconsistent with the descriptor. The error occurs when processing data for a rowset cursor.

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 Part 2 of *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. For the DB2 system generating the DSNL031I message, collect the following diagnostic items:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

In addition, identify all connected systems participating in the processing of the remote request. This includes the requester system to which the application is connected and the data server which is the target of the remote request. This may also include intermediate server systems. For each system that is a DB2 system, collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.

For non-DB2 systems, refer to the references specific to those products.

If any dumps were generated on any DB2 system participating in processing the remote request, collect the following diagnostic items:

- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.
- All dumps created by this failure.

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.

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 Part 2 of *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 DSNL032I message.

At this local DB2, collect the following diagnostic item:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.

- All dumps taken by the attachment facility or requesting application.

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.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

00D35B0F

Explanation: Acting as a DRDA server, DB2 has detected an error while parsing in an SQLDTA object received from a DRDA requester system. The total FDODSC object length computed from the constituent SDAs in the SQLDTAGRP is smaller than the stated length of the FDODSC object.

System action: The system generates an alert and returns message DSNL032I. Refer to the description of this message for further information.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *Utility Guide and Reference* for information on identifying and reporting the problem.

Problem determination: You should analyze the statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message.

At the DB2 for z/OS DRDA server, collect the following diagnostic items:

- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.

| • Statistics Class 4 trace record for the LUWID associated with the failing request.

| If the requester is a DB2 for z/OS system, collect the following diagnostic items:

| • 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.
| • All dumps taken by the attachment facility or requesting application.

| **00D35E4E**

| **Explanation:** DB2 has detected an error while parsing an SQLSTT object for an EXCSQLSET command received from a remote requester. The SQLSTT object length is larger than the containing DSS carrier object.

| **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 requester. 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 Part 2 of *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 DSNL032I message. For the DB2 system generating the DSNL032I message, collect the following diagnostic items:

| • Statistics Class 4 trace record for the LUWID associated with the failing request.

| In addition, identify all connected systems participating in the processing of the remote request. This includes the requester system to which the application is connected and the data server which is the target of the remote request. This may also include intermediate server systems. For each system that is a DB2 system, collect the following diagnostic items:

| • Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.

| For non-DB2 systems, refer to the documentation specific to those products for diagnostic procedures.

| If any dumps were generated on any DB2 system participating in processing the remote request, collect the following diagnostic items:

| • Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.
| • All dumps created by this failure.

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.

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: Refer to *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:
• Statistics Class 4 trace record for the LUWID associated with the failing request.

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At this DB2 remote server, collect the following diagnostic items listed in
• 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.
• All dumps taken by the attachment facility or requesting application.

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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.

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 Part 2 of *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:
• Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

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.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

00D35E07

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. An invalid instance variable was sent on a SECCHK command.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

00D35B15

Explanation: Acting as a DRDA server, DB2 has detected an error in an SQLDTA object received from a DRDA requester system. The total SQLDTA object length computed from the constituent scalar object is smaller than the stated length of the SQLDTA object itself.

System action: The system generates an alert and returns message DSNL032I. Refer to the description of this message for further information.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *Utility Guide and Reference* for information on identifying and reporting the problem.

Problem determination: You should analyze the statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message.

At the DB2 for z/OS DRDA server, collect the following diagnostic items:

- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Statistics Class 4 trace record for the LUWID associated with the failing request.

| If the requester is a DB2 for z/OS system, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

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.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

| **00D35E6B**

| **Explanation:** DB2 has detected an error while parsing a DDM SNDPKT command received from a remote requester. The SNDPKT command contains an invalid RDBNAM instance variable. Long variable name support has been negotiated but the RDBNAM value length either exceeded the 255 byte limit or was too short.

| **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) is returned to the remote requester.

| **Operator response:** Notify the system programmer.

| **System programmer response:** This is most likely an error at the remote requester system. If you suspect an error in DB2, refer to Part 2 of the 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 DSNL032I message. For the DB2 system generating the DSNL032I message, collect the following diagnostic items:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

| In addition, identify all connected systems participating in the processing of the remote request. This includes the requester system to which the application is connected and the data server which is the target of the remote request. This may also include intermediate server systems. For each system that is a DB2 system, collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.

| For non-DB2 systems, refer to the documentation specific to those products for diagnostic procedures.

| If any dumps were generated on any DB2 system participating in processing the remote request, collect the following diagnostic items:

- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.
- All dumps created by this failure.

| **00D35D28**

| **Explanation:** DB2 has detected an error while parsing a DDM EXCSQLSTT or OPNQRY command received from a remote requester. The value of the DDM enumerated scalar DYNDTAFMT 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 remote requester.

| **Operator response:** Notify the system programmer.

| **System programmer response:** If you suspect an error in DB2, refer to Part 2 of *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 DSNL032I message. For the DB2 system generating the DSNL032I message, collect the following diagnostic items:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

In addition, identify all connected systems participating in the processing of the remote request. This includes the requester system to which the application is connected and the data server which is the target of the remote request. This may also include intermediate server systems. For each system that is a DB2 system, collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.

For non-DB2 systems, refer to the documentation specific to those products for diagnostic procedures.

If any dumps were generated on any DB2 system participating in processing the remote request, collect the following diagnostic items:

- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.
- All dumps created by this failure.

00D35C09

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, BNDCHKEXS, 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) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

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At this DB2 remote server, collect the following diagnostic items listed in

- 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.
- All dumps taken by the attachment facility or requesting application.

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00D35E75

Explanation: DB2 has detected an error while parsing a DDM SECCHK command received from a remote client. The SECCHK command contains an invalid USRREGNM instance variable value that is not supported. The value exceeded the 255 bytes limit.

System action: A DDM reply message (SYNTAXRM) is returned to the DRDA client.

Operator response: Notify the system programmer.

System programmer response: This is most likely an error at the remote client system. If you suspect an error in DB2, refer to Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: You should analyze the statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message.

At the local DB2, collect the diagnostic items:

- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Statistics Class 4 trace record for the LUWID associated with the failing request.

If the remote client system, collect the diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

00D35E6E

Explanation: DB2 has detected an error while parsing a DDM SYNCCTL command received from a remote requester. The SYNCCTL command contains an invalid XAFLAGS instance variable - the value must be 4 bytes.

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) is returned to the remote requester.

Operator response: Notify the system programmer.

System programmer response: This is most likely an error at the remote requester system. If you suspect an error in DB2, refer to Part 2 of the 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 DSNL032I message. For the DB2

system generating the DSNL032I message, collect the
following diagnostic items:

- Statistics Class 4 trace record for the LUWID
  associated with the failing request.

In addition, identify all connected systems participating
in the processing of the remote request. This includes
the requester system to which the application is
connected and the data server which is the target of the
remote request. This may also include intermediate
server systems. For each system that is a DB2 system,
collect the following diagnostic items:

- Console output and the listing of the SYSLOG data
  set from each connected site for the period of time
  spanning the failure.

For non-DB2 systems, refer to the documentation
specific to those products for diagnostic procedures.

If any dumps were generated on any DB2 system
participating in processing the remote request, collect
the following diagnostic items:

- Listings of the SYS1.LOGREC data set, obtained by
  executing IFCEREP1 at each connected site.
- All dumps created by this failure.

00D35E33

Explanation: DB2 has detected an error in the DDM
SQLRSLRD 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
SQLRSLRD array, is inconsistent with the number of
result sets indicated in the RSLSETRM.

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 Part 2 of *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:

- 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.
- Statistics Class 4 trace record for the LUWID
  associated with the failing request.

If the DRDA server is DB2 for z/OS, then DB2
diagnostic information is available. In this case, at the
DB2 server, collect the following diagnostic items:

- 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.

00D300FF

Explanation: You attempted a COMMIT statement
and update operations were performed at a remote site.
The attempt failed.

System action: The updates at the remote site have
been backed out.

User response: Rerun the application.

Problem determination: Determine why the COMMIT
failed and retry the application.

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 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.

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: Refer to *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:

- Statistics Class 4 trace record for the LUWID
  associated with the failing request.

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At this DB2 remote server, collect the following
diagnostic items listed in

- 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.
- All dumps taken by the attachment facility or
  requesting application.

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00D35D20

Explanation: DB2 has detected an error while parsing a DDM command received from a DRDA requester. The value of the QRYROWSET instance variable on an EXCSQLSTT is less than zero. The minimum defined value for this instance variable is zero.

System action: DB2 generates an alert, and writes message DSNL032I to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the DRDA requester.

Operator response: Notify the System Programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *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.

If the DRDA requester is also a DB2 for OS/390 system, then at the requester DB2 system, collect the following diagnostic items:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- All dumps taken by the attachment facility or requesting application.

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.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

00D35A04

Explanation: DB2 has detected an error while parsing a DDM command data object received from a remote requester. The DDM object is SQLATTR. The SQLATTR object has a length exceeding 32K. The length 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 (SYNTAXRM) is returned to the remote requester.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *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 DSNL032I message. For the DB2 system generating the DSNL032I message, collect the following diagnostic items:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

In addition, identify all connected systems participating in the processing of the remote request. This includes the requester system to which the application is connected and the data server which is the target of the remote request. This may also include intermediate server systems. For each system that is a DB2 system, collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.

For non-DB2 systems, refer to the documentation specific to those products for diagnostic procedures.

If any dumps were generated on any DB2 system participating in processing the remote request, collect the following diagnostic items:

- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.
- All dumps created by this failure.

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 been terminated. The problem, though detected by DB2, is believed to have originated at the remote server. The server might not be a DB2 subsystem.

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 DSNL031I 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.

00D35D25

Explanation: DB2 has detected an error while parsing a DDM CNTQRY command received from a remote requester. The value of the DDM enumerated scalar FREPRVREF 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 remote requester.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *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 DSNL032I message. For the DB2 system generating the DSNL032I message, collect the following diagnostic items:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

In addition, identify all connected systems participating in the processing of the remote request. This includes the requester system to which the application is connected and the data server which is the target of the remote request. This may also include intermediate server systems. For each system that is a DB2 system, collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.

For non-DB2 systems, refer to the documentation specific to those products for diagnostic procedures.

If any dumps were generated on any DB2 system participating in processing the remote request, collect the following diagnostic items:

- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.
- All dumps created by this failure.

00D35E0C

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. An invalid USERID length was sent on a SECCHK command. DB2 user IDs cannot exceed 8 bytes.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

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.

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: Refer to *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

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At this DB2 remote server, collect the following diagnostic items listed in

- 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.
- All dumps taken by the attachment facility or requesting application.

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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. The value of the single element of the SQLNUMGRP, SQLNUM, defining the total number of SQLCIROW occurrences within the SQLCINRD array, is either negative or is inconsistent with the size of the SQLCINRD array.

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 Part 2 of *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:

- 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.
- Statistics Class 4 trace record for the LUWID associated with the failing request.

If the DRDA server is DB2 for z/OS, then DB2 diagnostic information is available. In this case, at the DB2 server, collect the following diagnostic items:

- 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.

00D35E3F

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.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

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.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

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.

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: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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 the section entitled "Data organization" of *Diagnosis Guide and Reference* for details of floating point range.

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

- Statistics Class 4 trace record for the LUWID associated with the failing request.

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00D35C27

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 a DDM object exceeds the length defined by DDM Level 3. This 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 (SYNTAXRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

.

At this DB2 remote server, collect the following diagnostic items listed in

- 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.
- All dumps taken by the attachment facility or requesting application.

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00D35D17

Explanation: DB2 has detected an error while parsing a DDM command received from a local DB2. The length of an instance variable received as a command parameter is less than the length of the instance variable, as specified by DDM Level 3.

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 Part 2 of *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 DSNL032I message.

At this local DB2, collect the following diagnostic items:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this DB2 remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

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.

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.

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.

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 Part 2 of *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 DSNL032I message.

At this local DB2, collect the following diagnostic item:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

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.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

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 part 2 of *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

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.

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: Refer to *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

.

At this DB2 remote server, collect the following diagnostic items listed in

- 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.
- All dumps taken by the attachment facility or requesting application.

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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').

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: Refer to *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

.

At this DB2 remote server, collect the following diagnostic items listed in

- 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.
- All dumps taken by the attachment facility or requesting application.

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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.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

00D35B09

Explanation: Acting as a DRDA server, DB2 has detected an error while parsing an SQLDTA object. The SQLDTA object, or one of its constituent members, has an object length less than 4. Its constituent members are listed below:

- FDODSC or FDODTA, in the case of an SQLDTA in non-array format
- FDODSC, FDOEXT, FDODTA, or FDOOFF, in the case of an SQLDTA in array format.

System action: The system generates an alert and returns message DSNL032I. Refer to the description of this message for further information.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *Utility Guide and Reference* for information on identifying and reporting the problem.

Problem determination: You should analyze the statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message.

At the DB2 for z/OS DRDA server, collect the following diagnostic items:

- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.

- Statistics Class 4 trace record for the LUWID associated with the failing request.

If the requester is a DB2 for z/OS system, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

00D35D0D

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.

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: Refer to *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

.

At this DB2 remote server, collect the following diagnostic items listed in

- 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.
- All dumps taken by the attachment facility or requesting application.

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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 part 2 of *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00D35C1E

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.

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: Refer to *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

.

At this DB2 remote server, collect the following diagnostic items listed in

- 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.

- All dumps taken by the attachment facility or requesting application.

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00D35D22

Explanation: DB2 has detected an error while parsing a DDM command received from a DRDA requester. The value of the DDM QRYRTNDTA enumerated value instance variable, contained within a DDM CNTQRY command, is other than FALSE (X'F0') or TRUE (X'F1').

System action: DB2 generates an alert, and writes message DSNL032I to the console. Refer to the description of this message for further information.

A DDM reply message (VALNSPRM)) will be returned to the DRDA requester.

Operator response: Notify the System Programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *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.

If the DRDA requester is also a DB2 for OS/390 system, then at the requester DB2 system, collect the following diagnostic items:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- All dumps taken by the attachment facility or requesting application.

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.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

00D35D21

Explanation: DB2 detected an error while parsing a DDM command received from a DRDA requester. The value of the DDM QRYRSTBLK enumerated value instance variable, contained within a DDM CNTQRY command, is other than FALSE (X'F0') or TRUE (X'F1').

System action: DB2 generates an alert, and writes message DSNL032I to the console. Refer to the description of this message for further information.

A DDM reply message (VALNSPRM)) will be returned to the DRDA requester.

Operator response: Notify the System Programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *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.

If the DRDA requester is also a DB2 for OS/390 system, then at the requester DB2 system, collect the following diagnostic items:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- All dumps taken by the attachment facility or requesting application.

00D35E26

Explanation: DB2, acting as a DRDA client, has detected an error in a nullable 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.

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: Refer to *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

- Statistics Class 4 trace record for the LUWID associated with the failing request.

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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, DFTRDBCOL are other than blank. While DDM defines the length of DFTRDBCOL to be 18 bytes, DB2 supports only 8-byte collection identifiers.

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: Refer to *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

.

At this DB2 remote server, collect the following diagnostic items listed in

- 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.
- All dumps taken by the attachment facility or requesting application.

.

00D35C29

Explanation: DB2 has detected an error while parsing a DDM command or DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. A package related identifier or collection identifier is in violation of the SAA syntax. This is either the collection identifier (DFTRDBCOL) received on a BGNBND or REBIND command or the package identifier or collection identifier within the PKGNAM, PDGNAMCT, or PKGNAMCSN mapped scalars received on a BGNBND, BNDSQLSTT, ENDBND, or DRPPKG command.

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 Part 2 of *Utility 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.

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.

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: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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 the section entitled "Data organization" of *Diagnosis Guide and Reference* for details of floating point range.

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

* Statistics Class 4 trace record for the LUWID associated with the failing request.

.

00D35D1D

Explanation: DB2 detected an error while parsing a DDM command received from DRDA requester. The value of the DDM QRYSCRORN enumerated value instance variable, contained within a DDM CNTQRY command, is unrecognized.

System action: DB2 generates an alert, and writes message DSNL032I to the console. Refer to the description of this message for further information.

A DDM reply message (VALNSPRM) will be returned to the DRDA requester.

Operator response: Notify the System Programmer.

System programmer response: Refer to *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.

If the DRDA requester is also a DB2 for OS/390 system, then at the requester DB2 system, collect the following diagnostic items:

* Statistics Class 4 trace record for the LUWID associated with the failing request.

.

At this remote server, collect the following diagnostic items:

* All dumps taken by the attachment facility or requesting application.

.

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.

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

00D35C10 • 00D35E78

A DDM reply message (VALNSPRM) will be returned to the remote DRDA client.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:

*   Statistics Class 4 trace record for the LUWID associated with the failing request.

. For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items:

*   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.
*   All dumps taken by the attachment facility or requesting application.

.

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.

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: Refer to *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:

*   Statistics Class 4 trace record for the LUWID associated with the failing request.

.

At this DB2 remote server, collect the following diagnostic items listed in

*   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.
*   All dumps taken by the attachment facility or requesting application.

.

00D35E24

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 1-byte length field. The value of the length field is greater than the maximum length specified by the DDM descriptor for the field.

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: Refer to *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

*   Statistics Class 4 trace record for the LUWID associated with the failing request.

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00D35E78

Explanation: DB2 acts as a DRDA intermediate server passing input data to another DRDA server. It has detected an error in an SQLDTA object. A NUL-terminated string was found in the FDODTA scalar where the NUL-terminator could not be located within the data field as defined by the DDM descriptor received.

System action: The system generates an alert and returns message DSNL032I. Refer to the description of this message for further information.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *Utility Guide and Reference* for information on identifying and reporting the problem.

Problem determination: You should analyze the statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message.

| At the DB2 for z/OS DRDA server, collect the
| following diagnostic items:
| • SVC dump (or system dump), taken to
| SYS1.DUMPxx data set, as result of an
| operator-initiated dump command or SLIP trap exit.
| • Statistics Class 4 trace record for the LUWID
| associated with the failing request.

| If the requester is a DB2 for z/OS system, collect the
| following diagnostic items:
| • 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.
| • All dumps taken by the attachment facility or
| requesting application.

00D300F5

Explanation: DDM command chaining is in use.

System action: The DTM module returns to its invoker with a return code = 4.

00D35D0E

Explanation: DB2 has detected an error while parsing a DDM command received from a local DB2. Bytes 17 and 18 of the DDM scalar, RDBNAM, are other than blank. While DDM Level 3 defines the length of this scalar to be 18 bytes, DB2 supports only a 16 byte RDBNAM.

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: Refer to *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:
• Statistics Class 4 trace record for the LUWID associated with the failing request.

.

At this DB2 remote server, collect the following diagnostic items listed in
• 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.

• All dumps taken by the attachment facility or requesting application.

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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.

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 Part 2 of *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:
• Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:
• 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.
• All dumps taken by the attachment facility or requesting application.

00D35E68

| **Explanation:** DB2 has detected an error while parsing
| a DDM SNDPKT command received from a remote
| requester. The SNDPKT command contains an instance
| variable code point that has been duplicated.

| **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) is returned to the
| remote requester.

| **Operator response:** Notify the system programmer.

| **System programmer response:** This is most likely an
| error at the remote requester system. If you suspect an
| error in DB2, refer to Part 2 of the 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 DSNL032I message. For the DB2
| system generating the DSNL032I message, collect the
| following diagnostic items:

| • Statistics Class 4 trace record for the LUWID
| associated with the failing request.

| In addition, identify all connected systems participating
| in the processing of the remote request. This includes
| the requester system to which the application is
| connected and the data server which is the target of the
| remote request. This may also include intermediate
| server systems. For each system that is a DB2 system,
| collect the following diagnostic items:

| • Console output and the listing of the SYSLOG data
| set from each connected site for the period of time
| spanning the failure.

| For non-DB2 systems, refer to the documentation
| specific to those products for diagnostic procedures.

| If any dumps were generated on any DB2 system
| participating in processing the remote request, collect
| the following diagnostic items:

| • Listings of the SYS1.LOGREC data set, obtained by
| executing IFCEREP1 at each connected site.
| • All dumps created by this failure.

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.

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: Refer to *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:

• Statistics Class 4 trace record for the LUWID
  associated with the failing request.

.

At this DB2 remote server, collect the following
diagnostic items listed in

• 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.

• All dumps taken by the attachment facility or
  requesting application.

.

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.

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: Refer to *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

• Statistics Class 4 trace record for the LUWID
  associated with the failing request.

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| ### 00D35E70

| **Explanation:** DB2 has detected an error while parsing
| a DDM ACCSEC command received from a remote
| requester. The ACCSEC command contains an invalid
| ENCALG instance variable - the value must be 2 bytes.

| **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) is returned to the
| remote requester.

| **Operator response:** Notify the system programmer.

| **System programmer response:** This is most likely an
| error at the remote requester system. If you suspect an
| error in DB2, refer to Part 2 of the 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 DSNL032I message. For the DB2
| system generating the DSNL032I message, collect the
| following diagnostic items:

| • Statistics Class 4 trace record for the LUWID
| associated with the failing request.

In addition, identify all connected systems participating in the processing of the remote request. This includes the requester system to which the application is connected and the data server which is the target of the remote request. This may also include intermediate server systems. For each system that is a DB2 system, collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.

For non-DB2 systems, refer to the documentation specific to those products for diagnostic procedures.

If any dumps were generated on any DB2 system participating in processing the remote request, collect the following diagnostic items:

- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.
- All dumps created by this failure.

00D35E61

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. An invalid XSHR length was received on a SYNCCTL command sent by a remote requester.

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) is returned to the remote requester.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *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 DSNL032I message. For the DB2 system generating the DSNL032I message, collect the following diagnostic items:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

In addition, identify all connected systems participating in the processing of the remote request. This includes the requester system to which the application is connected and the data server which is the target of the remote request. This may also include intermediate server systems. For each system that is a DB2 system, collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.

For non-DB2 systems, refer to the documentation specific to those products for diagnostic procedures.

If any dumps were generated on any DB2 system participating in processing the remote request, collect the following diagnostic items:

- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.
- All dumps created by this failure.

00D35B11

Explanation: Acting as a DRDA server, DB2 has detected an error while parsing an SQLDTA object in an array format. The number elements in the FDOEXT scalar object is not equal to the number elements of SDAs in the SQLDTAGRP in the FDODSC.

System action: The system generates an alert and returns message DSNL032I. Refer to the description of this message for further information.

A DSCINVRM reply message is returned to the requester.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *Utility Guide and Reference* for information on identifying and reporting the problem.

Problem determination: You should analyze the statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message.

At the DB2 for z/OS DRDA server, collect the following diagnostic items:

- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Statistics Class 4 trace record for the LUWID associated with the failing request.

If the requester is a DB2 for z/OS system, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

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.

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: Refer to *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

* Statistics Class 4 trace record for the LUWID associated with the failing request.

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00D35C25

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 a DDM object is less than 4, the minimum length of any DDM object. This 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 (SYNTAXRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:

* Statistics Class 4 trace record for the LUWID associated with the failing request.

.

At this DB2 remote server, collect the following diagnostic items listed in

* 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.
* All dumps taken by the attachment facility or requesting application.

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00D35E77

Explanation: DB2 has detected an error while parsing a DDM SECCHK command received from a remote client. The SECCHK command contains an invalid USRSECTOK instance variable value that is not supported. The value must be 4096 bytes or less.

System action: Notification of the failure is returned to the application. The requested trusted connection is not established.

Operator response: Notify the system programmer.

System programmer response: This is most likely an error at the remote client system. If you suspect an error in DB2, refer to Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: You should analyze the statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message.

At the local DB2, collect the diagnostic items:

* SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
* Statistics Class 4 trace record for the LUWID associated with the failing request.

If the remote client system, collect the diagnostic items:

* 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.
* All dumps taken by the attachment facility or requesting application.

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.

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:

* Statistics Class 4 trace record for the LUWID associated with the failing request.

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At this DB2 remote server, collect the following
diagnostic items listed in

- 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.
- All dumps taken by the attachment facility or
  requesting application.

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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).

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.

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.

User response: Contact the system programmer

Problem determination: Examine the SQL return code
in the SQLCA. It should give further indication of the
real cause.

00D35D18

Explanation: DB2 has detected an error while parsing
a DDM command received from a DRDA requester.
The value of the DDM scalar, MAXRSLCNT, contained
as a parameter on a DDM EXCSQLSTT command, is
invalid. The value of MAXRSLCNT must be greater
than or equal to -1.

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 DRDA requester.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error
in DB2, refer to Part 2 of *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 DSNL032I.

If the DRDA requester is DB2 for z/OS, then DB2
diagnostic information is available. In this case, at the
DB2 requester, collect the following diagnostic items:

- 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.

At the DB2 server, collect the following diagnostic
items:

- 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.
- Statistics Class 4 trace record for the LUWID
  associated with the failing request.

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 SQLCADTA 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.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID
  associated with the failing request.

For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

00D35B14

Explanation: Acting as a DRDA server, DB2 has detected an error while parsing an SQLDTA object. The FDODTA scalar object is a null FD:OCA group and contains no input data values. The FDODTA scalar object must be non-null and must contain the input data values described by the FDODSC scalar object

System action: The system generates an alert and returns message DSNL032I. Refer to the description of this message for further information.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *Utility Guide and Reference* for information on identifying and reporting the problem.

Problem determination: You should analyze the statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message.

At the DB2 for z/OS DRDA server, collect the following diagnostic items:

- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Statistics Class 4 trace record for the LUWID associated with the failing request.

If the requester is a DB2 for z/OS system, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

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 the 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.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

You should also analyze the statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message.

Problem determination: If the remote DRDA client is a DB2 for MVS system, at the DB2 DRDA client, collect the following diagnostic items:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

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 17 and 18 of the DDM scalar, RDBNAM, are other than blank. While DDM defines the length of RDBNAM to be 18 bytes, DB2 supports only a 16 byte RDBNAM.

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: Refer to *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

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At this DB2 remote server, collect the following diagnostic items listed in

- 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.
- All dumps taken by the attachment facility or requesting application.

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00D35D06

Explanation: DB2 has detected an error while parsing a DDM command received from a remote requester. An OPNQRY command was received containing an instance variable that is not supported at the DDM level negotiated during CONNECT processing.

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) is returned to the remote requester.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *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 DSNL032I message. For the DB2 system generating the DSNL032I message, collect the following diagnostic items:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

In addition, identify all connected systems participating in the processing of the remote request. This includes the requester system to which the application is connected and the data server which is the target of the remote request. This may also include intermediate server systems. For each system that is a DB2 system, collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.

For non-DB2 systems, refer to the documentation specific to those products for diagnostic procedures.

If any dumps were generated on any DB2 system participating in processing the remote request, collect the following diagnostic items:

- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.
- All dumps created by this failure.

00D35E74

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 data to be parsed is inconsistent with the descriptor. The error occurs when processing data for a rowset cursor.

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 Part 2 of *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. For the DB2 system generating the DSNL031I message, collect the following diagnostic items:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

In addition, identify all connected systems participating in the processing of the remote request. This includes the requester system to which the application is connected and the data server which is the target of the remote request. This may also include intermediate server systems. For each system that is a DB2 system, collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.

For non-DB2 systems, refer to the references specific to those products.

If any dumps were generated on any DB2 system participating in processing the remote request, collect the following diagnostic items:

- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.
- All dumps created by this failure.

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.

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 Part 2 of *Utility 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 DB2 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 AS trace information or dumps.

00D35C28

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 a DDM object is less than the length defined by DDM Level 3. This 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 (SYNTAXRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:

• Statistics Class 4 trace record for the LUWID associated with the failing request.

.

At this DB2 remote server, collect the following diagnostic items listed in

• 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.
• All dumps taken by the attachment facility or requesting application.

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00D35D19

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.

A DDM reply message (VALNSPRM) 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 Part 2 of *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 OS/390, at the DRDA client, collect the following diagnostic items:

• Statistics Class 4 trace record for the LUWID associated with the failing request.

For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items:

• 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.
• All dumps taken by the attachment facility or requesting application.

00D300F7

Explanation: A DDM reply message was too big to fit in the DTM reply buffer.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This error should never occur. Write an APAR.

Collect the following diagnostic items:
- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00D35E5C

Explanation: DB2 has detected an error while parsing the DDM SECCHK 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 Part 2 of *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:
- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:
- 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.
- All dumps taken by the attachment facility or requesting application.

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.

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 Part 2 of *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:
- Statistics Class 4 trace record for the LUWID associated with the failing request.

For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items:
- 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.
- All dumps taken by the attachment facility or requesting application.

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 architected SQLCODE (-300xx) and associated SQLSTATE.

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.

00D35B12 • 00D35E10

System programmer response: If you suspect an error in DB2, refer to Part 2 of *Utility 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.

00D35B12

Explanation: Acting as a DRDA server, DB2 has detected an error while parsing an SQLDTA object in an array format. The number elements in the FDOEXT scalar object is not equal to the number elements in the FDOOFF scalar object.

System action: The system generates an alert and returns message DSNL032I. Refer to the description of this message for further information.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *Utility Guide and Reference* for information on identifying and reporting the problem.

Problem determination: You should analyze the statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message.

At the DB2 for z/OS DRDA server, collect the following diagnostic items:

- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Statistics Class 4 trace record for the LUWID associated with the failing request.

If the requester is a DB2 for z/OS system, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

00D35C01

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 BGNBND command.

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: Refer to *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this DB2 remote server, collect the following diagnostic items listed in

- 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.
- All dumps taken by the attachment facility or requesting application.

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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.

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: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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 the section entitled "Data organization" of *Diagnosis Guide and Reference* for details of floating point range.

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

- Statistics Class 4 trace record for the LUWID associated with the failing request.

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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.

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: Refer to *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

.

At this DB2 remote server, collect the following diagnostic items listed in

- 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.
- All dumps taken by the attachment facility or requesting application.

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00D35E17

Explanation: DB2, acting as a DRDA client, has detected a floating point conversion error when converting a nullable 4-byte floating point number in 80x86 format to System/370 format.

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: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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 the section entitled "Data organization" of *Diagnosis Guide and Reference* for details of floating point range.

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

- Statistics Class 4 trace record for the LUWID associated with the failing request.

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00D35D29

Explanation: DB2 has detected an error while parsing a DDM GETNXTCHK command received from a remote requester. The value of the DDM enumerated scalar REFRST 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 remote requester.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *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 DSNL032I message. For the DB2 system generating the DSNL032I message, collect the following diagnostic items:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

In addition, identify all connected systems participating in the processing of the remote request. This includes the requester system to which the application is connected and the data server which is the target of the remote request. This may also include intermediate server systems. For each system that is a DB2 system, collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.

For non-DB2 systems, refer to the documentation specific to those products for diagnostic procedures.

If any dumps were generated on any DB2 system participating in processing the remote request, collect the following diagnostic items:

| • Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

| • All dumps created by this failure.

00D35E56

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. One or more late environment descriptors is included within the previously specified SQLDTAGRP late group descriptor. However, the SQLDTARD row (RLO) Meta Data Definition (MDD) is either incorrect or has not been included within the SQLDTARD descriptor. The descriptor 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 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 Part 2 of *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:

• Statistics Class 4 trace record for the LUWID associated with the failing request.

For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items:

• 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.
• All dumps taken by the attachment facility or requesting application.

00D35D24

| **Explanation:** DB2 has detected an error while parsing a DDM EXCSQLSTT command received from a remote requester. The value of the DDM enumerated scalar NBRROW 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 remote requester.

| **Operator response:** Notify the system programmer.

| **System programmer response:** If you suspect an error in DB2, refer to Part 2 of *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 DSNL032I message. For the DB2 system generating the DSNL032I message, collect the following diagnostic items:

| • Statistics Class 4 trace record for the LUWID associated with the failing request.

| In addition, identify all connected systems participating in the processing of the remote request. This includes the requester system to which the application is connected and the data server which is the target of the remote request. This may also include intermediate server systems. For each system that is a DB2 system, collect the following diagnostic items:

| • Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.

| For non-DB2 systems, refer to the documentation specific to those products for diagnostic procedures.

| If any dumps were generated on any DB2 system participating in processing the remote request, collect the following diagnostic items:

| • Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.
| • All dumps created by this failure.

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.

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: Refer to *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items: Collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

00D35C32

Explanation: DB2 has detected an error while parsing a DDM BNDCPY command received from a remote requester. An invalid instance variable has been received as a parameter on an BNDCPY command.

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for more information.

A DDM reply message (PRMNSPRM)) is returned to the remote requester.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *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 DSNL032I message. For the DB2 system generating the DSNL032I message, collect the following diagnostic items:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

In addition, identify all connected systems participating in the processing of the remote request. This includes the requester system to which the application is connected and the data server which is the target of the remote request. This may also include intermediate server systems. For each system that is a DB2 system, collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.

For non-DB2 systems, refer to the documentation specific to those products for diagnostic procedures.

If any dumps were generated on any DB2 system participating in processing the remote request, collect the following diagnostic items:

- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.
- All dumps created by this failure.

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.

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: Refer to *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

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At this DB2 remote server, collect the following diagnostic items listed in

- 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.
- All dumps taken by the attachment facility or requesting application.

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00D35E4C

Explanation: DB2 has detected an error while parsing an SQLSTT object for an EXCSQLSET command received from a remote requester. Both a mixed-byte and a single-byte SQL statement string were received, or the mixed-byte SQL statement string is non-null, but has a zero length or the single-byte SQL statement string is not null, but has a zero length.

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 requester. 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 Part 2 of *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 DSNL032I message. For the DB2 system generating the DSNL032I message, collect the following diagnostic items:

• Statistics Class 4 trace record for the LUWID associated with the failing request.

In addition, identify all connected systems participating in the processing of the remote request. This includes the requester system to which the application is connected and the data server which is the target of the remote request. This may also include intermediate server systems. For each system that is a DB2 system, collect the following diagnostic items:

• Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.

For non-DB2 systems, refer to the documentation specific to those products for diagnostic procedures.

If any dumps were generated on any DB2 system participating in processing the remote request, collect the following diagnostic items:

• Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

• All dumps created by this failure.

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.

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 Part 2 of *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:

• Statistics Class 4 trace record for the LUWID associated with the failing request.

For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items:

• 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.

• All dumps taken by the attachment facility or requesting application.

00D35E36

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.

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 Part 2 of *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:

• 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.

• Statistics Class 4 trace record for the LUWID associated with the failing request.

If the DRDA server is DB2 for z/OS, then DB2 diagnostic information is available. In this case, at the DB2 server, collect the following diagnostic items:

- 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.

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.

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: Refer to *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

.

At this DB2 remote server, collect the following diagnostic items listed in

- 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.
- All dumps taken by the attachment facility or requesting application.

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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.

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: Refer to *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

.

At this DB2 remote server, collect the following diagnostic items listed in

- 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.
- All dumps taken by the attachment facility or requesting application.

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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.

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: Refer to *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

.

At this DB2 remote server, collect the following diagnostic items listed in

- 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.

• All dumps taken by the attachment facility or requesting application.

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00D35C24

Explanation: DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. The DDM TIMESTAMP scalar has been received as a command parameter from a database other than DB2. The TIMESTAMP scalar is private to DB2.

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: Refer to *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:

• Statistics Class 4 trace record for the LUWID associated with the failing request.

.

At this DB2 remote server, collect the following diagnostic items listed in

• 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.
• All dumps taken by the attachment facility or requesting application.

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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.

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 Part 2 of *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:

• Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

• 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.
• All dumps taken by the attachment facility or requesting application.

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.

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 Part 2 of *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:

• Statistics Class 4 trace record for the LUWID associated with the failing request.

For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items:

• 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.

- All dumps taken by the attachment facility or requesting application.

00D35E34

Explanation: DB2 has detected an error in the DDM SQLRSLRD 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.

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 Part 2 of *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:

- 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.
- Statistics Class 4 trace record for the LUWID associated with the failing request.

If the DRDA server is DB2 for z/OS, then DB2 diagnostic information is available. In this case, at the DB2 server, collect the following diagnostic items:

- 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.

00D35E42

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. An invalid UOWID length was sent on a SYNCCTL command.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

00D35D14

Explanation: DB2 has detected an error while parsing a DDM command received from a local DB2. The length of one or more instance variables received as command parameters is less than 4. This is the minimum length to support a DDM length and code point (llcp).

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 Part 2 of *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 DSNL032I message.

At this local DB2, collect the following diagnostic items:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this DB2 remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

00D300FB

Explanation: A resource was not available during database access agent allocation at a remote site.

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.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer. Invoke the application after the problem has been corrected.

Problem determination: Determine the name of the resource being allocated and correct the problem.

00D35E1F

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.

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: Refer to *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

*   Statistics Class 4 trace record for the LUWID associated with the failing request.

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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.

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: Refer to *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:

*   Statistics Class 4 trace record for the LUWID associated with the failing request.

.

At this DB2 remote server, collect the following diagnostic items listed in

*   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.
*   All dumps taken by the attachment facility or requesting application.

.

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 Part 2 of *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:

*   Statistics Class 4 trace record for the LUWID associated with the failing request.

For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items:

*   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.

• All dumps taken by the attachment facility or requesting application.

00D35C1A

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 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.

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: Refer to *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:

• Statistics Class 4 trace record for the LUWID associated with the failing request.

.

At this DB2 remote server, collect the following diagnostic items listed in

• 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.

• All dumps taken by the attachment facility or requesting application.

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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.

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 Part 2 of *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 DSNL032I message.

At this local DB2, collect the following diagnostic item:

• Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

• 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.

• All dumps taken by the attachment facility or requesting application.

00D35E49

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. An invalid TCPHOST length was sent on a SYNCLOG object.

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 Part 2 of *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:

• Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

• 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.

• All dumps taken by the attachment facility or requesting application.

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).

System action: The DB2 server terminates the conversation with a 084B6031 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 data base 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.

00D35C1F

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.

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: Refer to *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:

- Statistics Class 4 trace record for the LUWID
  associated with the failing request.

.

At this DB2 remote server, collect the following
diagnostic items listed in

- 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.
- All dumps taken by the attachment facility or
  requesting application.

.

00D35C08

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.

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: Refer to *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:

- Statistics Class 4 trace record for the LUWID
  associated with the failing request.

.

At this DB2 remote server, collect the following
diagnostic items listed in

- 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.
- All dumps taken by the attachment facility or
  requesting application.

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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.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID
  associated with the failing request.

At this remote server, collect the following diagnostic
items:

- 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.
- All dumps taken by the attachment facility or
  requesting application.

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.

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: Refer to *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

.

At this DB2 remote server, collect the following diagnostic items listed in

- 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.
- All dumps taken by the attachment facility or requesting application.

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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.

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: Refer to *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

.

At this DB2 remote server, collect the following diagnostic items listed in

- 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.
- All dumps taken by the attachment facility or requesting application.

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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 SQLCADTA row triplet (RLO) is either invalid or has not been included within the SQLDTARD descriptor. The descriptor 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 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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

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.

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: Refer to *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

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At this DB2 remote server, collect the following diagnostic items listed in

- 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.
- All dumps taken by the attachment facility or requesting application.

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00D35B0C

Explanation: Acting as a DRDA server, DB2 has detected an error while parsing an SQLDTA object. The SQLDTA object itself, or one of its constituent members has an object length that is greater than the actual length remaining in the enclosing object. The constituent members are listed below:

- FDODSC or FDODTA, in the case of an SQLDTA in non-array format
- FDODSC, FDOEXT, FDODTA, or FDOOFF, in the case of an SQLDTA in array format

For example, a FDODSC scalar as an object length that is greater than the SQLDTA object in which it is

contained, or an SQLDTA object has an object length greater than the DSS in which it is contained.

System action: The system generates an alert and returns message DSNL032I. Refer to the description of this message for further information.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: You should analyze the statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message.

At the DB2 for z/OS DRDA server, collect the following diagnostic items:

- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Statistics Class 4 trace record for the LUWID associated with the failing request.

If the requester is a DB2 for z/OS system, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

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.

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: Refer to *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

- Statistics Class 4 trace record for the LUWID associated with the failing request.

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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.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

00D35B10

Explanation: Acting as a DRDA server, DB2 has detected an error while parsing an SQLDTA object. While parsing a constituent part of the SQLDTA object, the constituent part has a stated or implied length that is larger than the stated length of the SQLDTA object itself.

System action: The system generates an alert and returns message DSNL032I. Refer to the description of this message for further information.

A DSCINVRM reply message is returned to the requester.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *Utility Guide and Reference* for information on identifying and reporting the problem.

Problem determination: You should analyze the statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message.

At the DB2 for z/OS DRDA server, collect the following diagnostic items:

- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.

- Statistics Class 4 trace record for the LUWID associated with the failing request.

If the requester is a DB2 for z/OS system, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

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.

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 abend was initiated in order to save diagnostic information that might be useful in problem determination.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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 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.

If you suspect an error in DB2, refer to Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

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 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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

00D30003

Explanation: While establishing an ESTAE functional recovery, DB2 detected a failure.

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. If you suspect an error in DB2, refer to Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

00D30004

Explanation: A database access agent received an invalid message. 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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

00D30005

Explanation: DB2 detected a failure while retrying DB2 recovery.

System action: DB2 abends after it writes a SYS1.LOGREC record and requests a SVC dump.

Operator response: Notify the system programmer.

System programmer response: This is a DB2 internal error. Obtain a copy of the SYS1.LOGREC listing and the SVC dump. Determine the failing environment (DB2, IMS, CICS, or TSO). Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: A distributed data facility (DDF) module retried recovery after an abend, but invalidly returned control to the DDF functional recovery routine (DSNLFRCV) that issued the abend.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00D30008

Explanation: The distributed transaction manager (DTM) could not allocate a RALE for the distributed data facility (DDF). 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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

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.

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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

00D3000A

Explanation: DB2 invoked the DSNLTDSC macro or a function of the distributed transaction manager (DTM). The required function could not be performed because the DPSB control block does not exist. This is a DB2 internal error.

System action: DB2 writes a SYS1.LOGREC record and requests a SVC dump. The execution unit abnormally terminates.

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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: DB2 detects this error when the module that abnormally terminated is invoked and determines that the existence of the DDF agent local anchor block (DPSB) is not indicated by the DDF RALE or is not indicated by the ACE.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00D3000B

Explanation: A function of the distributed transaction manager (DTM) was invoked and attempted to establish a functional recovery environment. The functional recovery element (FRE) that was created was not the first one on the chain of FREs anchored in the DPSB. 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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

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.

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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

00D3000D

Explanation: A request using application-directed access starting at site 'A' referenced an object at site 'B' that is stored at site 'A'.

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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

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.

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 Part 2 of *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).

- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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 part 2 of *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:
- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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 part 2 of *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 the SYSLOG data set for the period of time spanning the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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 part 2 of *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:
- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00D30013

Explanation: The facility section (DSN6FAC) in the DB2 initialization parameter module does not exist.

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.

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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

00D30015

Explanation: The facility section (DSN6FAC) in the DB2 initialization parameter module is invalid.

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.

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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

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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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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 part 2 of *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:

- 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.

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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 cancellation 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 part 2 of *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 the SYSLOG data set for the period of time spanning the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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 describing what DB2 authorization ID should 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 authorization ID received from the remote LU.

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.

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 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.

00D3001D

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 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.

00D3001E • 00D30021

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 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.

00D3001E

Explanation: The SYSTEM PARAMETER section (DSN6SYSP) in the DB2 installation parameter module does not exist.

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 DSNZPARM module used.

Problem determination: Ensure that DSN6SYSP was installed correctly.

00D3001F

Explanation: ACCRDBRM received from the remote server indicates incompatible server.

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.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *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.

User response: Notify the system programmer. Invoke the application after the problem has been corrected.

Problem determination: Determine the server being accessed by examining the SQLCODE -30041 message text. Refer also to the DDM documentation of the ACCRDB 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 action: The remote server database access agent (DBAA) sends a DRDA reply message (for example, MGRLVLRM) 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: Operator will not detect this problem.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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.

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 SQLCODE 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:
- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

Collect the following local DB2 diagnostic items:
- Application source code and runtime listing.
- Relevant error and system logs spanning the time of the failure.

00D30021

Explanation: The processing of the CONNECT statement at a DB2 remote server has failed. This is because acceptable CONNECT information was not conveyed in the distributed relational database architecture (DRDA) ACCRDB command sent by the

local DB2 to the remote server.

System action: The remote server database access agent (DBAA) sends a DRDA reply message (for example, VALNSPRM) 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: Operator will not detect this problem.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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.

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 TYPDEFNAM parameter (specifies local DB2 data types) in the ACCRDB command is not supported.
- The TYPDEFOVR 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.

00D30022

Explanation: The processing of the CONNECT statement at the remote server has failed and the local DB2 Data Base Access Agent (DBAA) has been abended. This is because authorization checking has failed at the remote server.

System action: The conversation with the local DB2 is terminated by the remote server with an LU6.2 SNA sense code. The DBAA is abended. A DSNL030I message is written to the MVS console at the remote server, and an alert is generated.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Either the user does not have the proper authority to execute at the remote server, or there is a security configuration mismatch in the communication database between the local DB2 and the remote server. (For example, a row might be missing in the SYSIBM.USERNAMES table at 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:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

Related information

⮕ DSNL030I (DB2 Messages)

00D3002D

Explanation: The connection to the remote server failed. The SYSIBM.USERNAMES table did not contain an outbound row and did not specify the remote authorization ID for the plan owner DB2 authorization ID. When the USERNAMES column in SYSIBM.LUNAMES or SYSIBM.IPNAMES is specified as 'O' or 'B', outbound name translation is in use. The SYSIBM.USERNAMES table must contain entries that describe the remote authorization IDs that are used for each DB2 authorization ID that communicates with the LU or the TCP/IP address.

System action: A response is sent to the application to indicate that the resource is unavailable. 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 or SYSIBM.IPNAMES is specified correctly for the indicated LUNAME or IPADDR. If you intend to use remote authorization IDs that differ from the DB2 authorization IDs, verify that the SYSIBM.USERNAMES table has rows that 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: 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.

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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:
- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

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00D3002F

Explanation: An unrecognized function request was detected during resynchronization. This is an 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 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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:
- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

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00D30030

Explanation: This site is not considered a coordinator or participant during resynchronization. This is an 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 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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:
- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

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00D30031

Explanation: An unknown 2-phase COMMIT protocol is being used during resynchronization. This is an 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 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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

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00D30032

Explanation: This site is not considered either an initiator or recipient of resynchronization. This is an 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 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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

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00D30033

Explanation: This site is invalidly an initiator of resynchronization. This is an 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 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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

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00D30034

Explanation: An INDOUBT resync list entry does not have the correct associated structures during resynchronization. This is an 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 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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

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00D30035

Explanation: A resolved unit of work still has internal structures associated with it during resynchronization. This is an 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 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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

*   Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
*   Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

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00D30036

Explanation: Either the coordinator or participant has an invalid status during resynchronization. This is an 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 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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

*   Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
*   Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

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00D30037

Explanation: The resync list latch is erroneously still being held during resynchronization. This is an 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 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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

*   Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
*   Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

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00D30038

Explanation: The storage calculation for the amount of storage needed for -DISPLAY THREAD is invalid. This is an 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 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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

*   Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.

- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

00D30039

Explanation: A resync conversation is invalid. This is an 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 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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

00D3003A

Explanation: An error occurred during resynchronization. This is an 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 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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

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 IDTHTOIN value in the DSN6FAC 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 Part 2 of *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:

00D3003C

Explanation: A client program issued a cancel request that terminated processing of the SQL statement.

System action: The SQL statement was terminated and any changes made by that statement have been undone. If an SQL cursor is associated with the interrupted SQL statement, that cursor is closed. An sqlcode of -952 is issued.

00D30040

Explanation: An invalid or incomplete DDF communication record was found in the BSDS.

System programmer response: Use the DSNJU003 change log inventory utility to add a valid DDF communication record to the BSDS.

00D30041

Explanation: An invalid subsystem IPv4 address was found the BSDS. The specified address does not conform to dotted decimal form.

System programmer response: Use the DSNJU003 change log inventory utility to correct or remove the BSDS DDF communication record subsystem IPv4 address. See the IPV4 and NOIPV4 keywords of the DDF statement for more information.

00D30042

Explanation: An invalid subsystem IPv6 address was found the BSDS. The specified address does not conform to colon hexadecimal form.

System programmer response: Use the DSNJU003 change log inventory utility to correct or remove the BSDS DDF communication record subsystem IPv6 address. See the IPV6 and NOIPV6 keywords of the DDF statement for more information.

00D30043

Explanation: An invalid group IPv4 address was found the BSDS. The specified address does not conform to dotted decimal form.

System programmer response: Use the DSNJU003 change log inventory utility to correct or remove the BSDS DDF communication record group IPv4 address. See the GRPIPV4 and NGRPIP4 keywords of the DDF statement for more information.

00D30044

Explanation: An invalid group IPv6 address was found the BSDS. The specified address does not conform to colon hexadecimal form.

System programmer response: Use the DSNJU003 change log inventory utility to correct or remove the BSDS DDF communication record group IPv6 address. See the GRPIPV6 and NGRPIPV6 keywords of the DDF statement for more information.

00D30045

Explanation: An subsystem IPv4 or IPv6 address is invalid with respect to the specified group IPv4 or IPv6 address. Data sharing members require subsystem or member and group pairs. That is, if a subsystem or member IP address is specified, a corresponding group address is also required since the DB2 subsystem is a member of a data sharing group.

System programmer response: Use the DSNJU003 change log inventory utility to add a corresponding group address or to remove the subsystem or member address. See the GRPIPV4, GRPIPV6, NOIPV4, and NOIPV6 keywords of the DDF statement for more information.

00D30046

Explanation: A value was found for the IPNAME field of the BSDS DDF record but only zero values were found for the PORT and RESPORT fields in the BSDS DDF record. If an IPNAME value is specified, DDF will only attempt to activate its TCP/IP communications support which needs values for PORT and RESPORT in the BSDS DDF record.

System programmer response: Use the DSNJU003 change log inventory utility to add non-zero values for the PORT and RESPORT fields of the BSDS DDF record or to remove the IPNAME value if SNA/APPC communication is desired.

00D30100

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.

System action: Any updates performed within the current unit of Work have been backed out.

Operator response: Operator will not detect this problem.

System programmer response: See âⵣⵣProblem Determinationâⵣⵣ section below.

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.

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.

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.

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: This reason code may be returned for a failed distributed commit using DRDA protocols. It indicates that commit has failed because an ABNUOWRM reply message was received from the server for a prior SQL statement, but an abort had not been driven at the DB2 requester prior to this commit and after the receipt of the ABNUOWRM.

An ABNUOWRM reply message is sent by the server when it has rolled back its unit-of-work in response to an unusual situation at the server (for example, deadlock or operator intervention). When an ABNUOWRM reply message is received by the requester, an abort must be driven at the requester to synchronize the distributed systems. Until an abort is driven, all subsequent SQL statements will receive an SQLCODE -906. After an abort is driven, further SQL statements will be accepted.

System action: The commit at the DB2 requester fails.

Operator response: The operator will not detect this problem.

System programmer response: Determine the cause of the problem represented by the SQLCODE returned with the ABNUOWRM and if necessary, work with the

system programmer at the server to resolve it. If you suspect an error in DB2, refer to Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Scan backwards in your application for the first non -906 SQLCODE prior to the commit. This SQLCODE was returned with the ABNUOWRM from the server system. Use the server product reference manuals to determine and correct whatever problem this SQLCODE represents on the server and rerun your application. This may involve contacting your system programmer if the situation at the Server cannot be corrected or improved by changes to the application program.

Problem determination: Collect the following diagnostic items:

- 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 SQLCODE 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 SQLCODE returned is negative, then this reason code will be contained in the alert sent to NetView®.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

00D30105 • 00D30106

- 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 the 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 canceled 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 canceled when it makes its next request to DB2.

System action: The commit operation is failed and the agent is canceled. The last unit of work was rolled back at all server systems when the STOP DDF MODE(FORCE) command was processed.

Operator response: Re-start DDF.

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.

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.

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.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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).

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

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.

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.

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.

Problem determination: Collect the following diagnostic items:

- 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.

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.

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.LOGREC.

If you suspect an error in DB2, refer to Part 2 of *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 the SYSLOG data set for the period of time spanning the failure.

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.

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 SYNC_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.

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.

System action: 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.

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.

User response: Notify the system programmer.

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.

System programmer response: Correct the error
detected by DCE or RACF. Both products write
messages to the MVS console describing the error.

User response: Notify the system programmer.

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 Part 2 of *Diagnosis Guide and Reference* for
information on identifying and reporting the problem.

00D30111

Explanation: DB2 SAF Identity Mapping service
encountered an error when a request was made to
process a user registry name.

| **System action:** The DB2 SAF Identity Mapping service request is not processed. Normal connection authentication continues.

| **System programmer response:** Verify that the z/OS system is running at z/OS Version 1.8 or higher.

00D31010

Explanation: An internal logic error occurred while a DCRM functional service was being invoked.

DSNLCnnn 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, 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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

00D31011

Explanation: An internal logic error occurred while invoking a VTAM functional service.

DSNLVnnn 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.

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 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 Part 2 of *Diagnosis Guide and Reference* for information on

identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

00D31012

Explanation: A VTAM functional service request failed because the state of the conversation was invalid for the request.

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

00D31013

Explanation: A DB2 message was received with an invalid message block header (MBH). The MBH is a header that precedes all messages exchanged between two DB2 subsystems.

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

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 Part 2 of *Diagnosis Guide and Reference* for
information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: Collect the following
diagnostic items:

- Console output and the listing of the SYSLOG data
  set from each connected site for the period of time
  spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by
  executing IFCEREP1 at each connected site.

00D31014

Explanation: One or more invalid parameters were
supplied while invoking a VTAM functional service.

System action: A record is written to SYS1.LOGREC
and an SVC dump is requested at the site of the DB2
abend.

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 Part 2 of
Diagnosis Guide and Reference for information on
identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: Collect the following
diagnostic items:

- Console output and the listing of the SYSLOG data
  set from each connected site for the period of time
  spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by
  executing IFCEREP1 at each connected site.

00D31018

Explanation: A syntax error was detected in a DDM
reply received from a remote distributed database
remote server.

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 Part 2 of *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 the SYSLOG data set for the
  period of time spanning the failure.
- Statistics Class 4 trace record for the LUWID
  associated with the failing request.

00D31019

Explanation: A DDM protocol error was detected in a
DDM reply received from a remote distributed
database remote server.

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 Part 2 of *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 the SYSLOG data set for the
  period of time spanning the failure.
- Statistics Class 4 trace record for the LUWID
  associated with the failing request.

00D3101A

Explanation: A syntax error was detected in a DDM
request received from a remote distributed database
local DB2.

System action: The attempt to access the DB2 server
fails, and the failure is reported to the local DB2.

A DSNL032I 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 Part 2 of *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 the SYSLOG data set for the period of time spanning the failure.
- Statistics Class 4 trace record for the LUWID associated with the failing request.

00D3101B

Explanation: A DDM protocol error was detected in a DDM request received from a remote distributed database local DB2.

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 Part 2 of *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 the SYSLOG data set for the period of time spanning the failure.
- Statistics Class 4 trace record for the LUWID associated with the failing request.

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00D3101C

Explanation: DB2 has detected an error while processing a connection request from DDCS. A DB2RA connection request was received from DDCS.

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.

00D31020

Explanation: An attempt was made to utilize SNA/APPC communications to create an outbound private or DRDA protocol connection. However, this DDF, as identified by the corresponding *resource-type* of 00001000 and its DB2 subsystem ID as the corresponding *resource-name*, was started with an IPNAME value. This process caused DDF to only start its TCP/IP communications support.

System action: Notification of the failure is returned to the application. The conversation is not allocated.

System programmer response: The following actions must be taken depending on the type of protocol, Private or DRDA, that is being used:

- Private protocol connections require SNA/APPC communications. A private protocol connection request failed if the SQLERRP value in the SQLCA was DSNLXRDS. If applications exist with plans, packages, or both, which have been bound with DBPROTOCOL(PRIVATE), then those plans or packages must be rebound with DBPROTOCOL(DRDA) as well as packages must exist on the possible target locations to be accessed by statements within the plans and/or packages. Consider using the Catalog Analysis Tool, DSNTP2DP, to examine the catalog and generate the necessary commands to convert plans and/or packages with private protocol remote location dependencies to DRDA protocol. If applications which require private protocol cannot be converted in a timely manner to DRDA protocol, then remove the IPNAME value from the BSDS DDF record by performing an update to the BSDS DDF record via the NOIPNAME parameter of the DDF statement of DSNJU003, the Change Log Inventory utility.
- An outbound DRDA protocol connection request was determined to require SNA/ APPC communications. This will occur when only a row in the SYSIBM.LUNAMES table of the Communications DataBase table has a LUNAME column value which matches to the LINKNAME column of the row in the SYSIBM.LOCATIONS table which corresponds to the location being requested by the application. If DDF was intended to be started with only its TCP/IP communications support, then a row must exist in the SYSIBM.IPNAMES table with a LINKNAME column value for each row in the SYSIBM.LOCATIONS table which has a distinct value for its LINKNAME column. Otherwise, remove the IPNAME value from the BSDS DDF record by performing an update to the BSDS DDF record via the NOIPNAME parameter of the DDF statement of DSNJU003, the Change Log Inventory utility.

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.

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 Part 2 of *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.
- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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.

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.

User response: Notify the DB2 system programmer.

Problem determination: Collect the following diagnostic items:

- 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.

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).

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:

- Location used in the alias entry in SYSIBM.SYSTABLES.
- Contents of the SYSIBM.LOCATIONS table.

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.

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:

- AUTHORIZATION ID, PLANNAME, and LUNAME of the thread that is used to select the MODENAME in the SYSIBM.MODESELECT table.
- Contents of SYSIBM.LOCATIONS and SYSIBM.MODESELECT tables.

00D31026

Explanation: The requested VTAM function was not performed because VTAM returned a nonzero return code while attempting to communicate on a conversation.

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 Part 2 of *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:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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: Determine why VTAM was terminated.

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.

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 Part 2 of *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:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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.

00D3102D

Explanation: The requested trusted connection was not established because the SECURITY_ OUT option in the SYSIBM.IPNAMES table in the communications database (CDB) is not defined correctly. If the TRUSTED column in SYSIBM. LOCATIONS table is set to 'Y', then the SECURITY_OUT column in the SYSIBM. IPNAMES table must be set to 'P', 'R', or 'E'.

System action: Notification of the failure is returned to the application. The requested trusted connection is not established.

Operator response: Notify the system programmer.

System programmer response: Set up the SYSIBM.IPNAMES table correctly.

00D3102E

Explanation: The remote server was not successfully connected. The SYSIBM.USERNAMES table did not contain a row for trusted context system authorization ID translation, the TYPE column specified as 'S' describing the system authorization ID. When the USERNAMES column in SYSIBM.IPNAMES specifies 'S' requiring system authorization ID translation, the SYSIBM.USERNAMES must contain an entry describing the system authorization ID used for establishing trusted connection.

System action: A resource unavailable is returned to the application. The request is not sent to the remote site.

Operator response: Notify the system programmer.

System programmer response: Make sure the USERNAMES column in SYSIBM.USERNAMES has been specified correctly for the indicated LINKNAME for trusted connection.

Problem determination: Analyze the

SYSIBM.USERNAMES table for an incorrect or missing entry.

00D31030

Explanation: A remote connection cannot be established. This problem might be caused by one of the following symptoms:

- LINKNAME column in the SYSIBM.LOCATIONS table in the Communications Data Base (CDB) is greater than 8 bytes.
- LUNAME column in the SYSIBM.LULIST table in the Communications Data Base (CDB) is greater than 8 bytes.
- MODENAME column in the SYSIBM.MODESELECT or SYSIBM.LUMODES table in the Communications Data Base (CDB) is greater than 8 bytes.
- DB2 authorization ID used for outbound authorization ID translation is greater than 8 bytes.

System action: Notification of the failure is returned to the application. The remote connection is unsuccessful.

System programmer response: Correct the column in error as indicated by the unavailable resource message. For DB2 authorization ID translation failure make sure the remote BIND OWNER option contains an authorization ID less than or equal to 8 bytes for normal connection.

Problem determination: Collect a listing of the SQL that was used to configure the CDB table in the error.

00D31031

Explanation: The local distributed data facility (DDF) is terminating.

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.

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.

User response: Contact your system programmer to determine why DDF was terminated.

00D31032

Explanation: The requested VTAM function failed because the distributed data facility (DDF) at the remote location is terminating.

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.

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 VTAMCollect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Listing of the contents of SYSIBM.LUMODES in the communications database.

00D31034

Explanation: The MAX REMOTE CONNECTED limit was reached and the conversation was abnormally deallocated. The thread was not allowed to connect to DB2.

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 distributed function failed. The database access agent was aborted at the remote location. Notification of the failure is returned to the requester system application however the failure is really due to an unexpected failure at the remote server system. This error is an internal error at the remote server system. Evidence of the failure should be visible as an abend in the remote server system's SYS1.LOGREC information, or, you might find the failure recorded in a dump.

System action: DB2 writes a SYS1.LOGREC record and requests an SVC dump at the remote DB2 site. DB2 server system recovery returns this reason code back to the requester system.

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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem. A dump should be present at the server system, or evidence of an abend should be visible in SYS1.LOGREC information around the time that this reason code was returned back to the requester system application. The internal error that caused the server system abend must be corrected.

Problem determination: Collect the following diagnostic items:

* Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
* Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

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.

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: Collect the following diagnostic items:

* Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
* Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

00D31037

Explanation: The connection to the remote server failed. The SYSIBM.USERNAMES table did not contain an outbound row and did not specify the remote authorization ID for the primary DB2 authorization ID. When the USERNAMES column in SYSIBM.LUNAMES or SYSIBM.IPNAMES is specified as 'O' or 'B', outbound name translation is in use. The SYSIBM.USERNAMES table must contain entries that describe the remote authorization IDs that are used for each DB2 authorization ID that communicates with the LU or the TCP/IP address.

System action: A response is sent to the application to indicate that the resource is unavailable. 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 or SYSIBM.IPNAMES is specified correctly for the indicated LUNAME or IPADDR. If you intend to use remote authorization IDs that differ from the DB2 authorization IDs, verify that the SYSIBM.USERNAMES table has rows that 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: 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 causes 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.

00D31039

Explanation: The allocation of a connection to the remote system failed. The SYSIBM.USERNAMES table at the requesting site did not contain an outbound row and did not specify the remote authorization ID to be used for this DB2 authorization ID. When the USERNAMES column in SYSIBM.LUNAMES or SYSIBM.IPNAMES is specified as 'O' or 'B', outbound name translation is in use. The SYSIBM.USERNAMES table must contain entries that describe the remote authorization IDs that are used for each DB2 authorization ID that communicates with the LU or the TCP/IP address.

System action: The connection to the remote system is not allocated.

Operator response: Notify the system programmer.

System programmer response: On the requesting system, make sure the USERNAMES column in SYSIBM.LUNAMES or SYSIBM.IPNAMES is specified correctly for the indicated LUNAME or IPADDR. If you intend to use remote authorization IDs that differ from the DB2 authorization IDs, verify that the SYSIBM.USERNAMES table has rows that 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 or IPADDR and find the authorization ID for the failing remote system. Collect the following diagnostic items:

| • Listing of the contents of the SYSIBM.IPNAMES and SYSIBM.LUNAMES tables at the local DB2 subsystem and the remote DB2 subsystem.
| • Listing of the contents of the SYSIBM.USERNAMES table at the local DB2 subsystem and the remote DB2 subsystem.

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.

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 LU6.2 conversation failed because the conversation limits for the desired partner LU and VTAM MODE have been reached.

System action: This reason code is generated internally when an attempt is made to allocate an LU6.2 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 LU6.2 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 LU6.2 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

LU6.2 conversations. The reclaiming process will reduce system throughput, since the reclaimed conversation will have to service multiple SQL statements.

00D3103C

| **Explanation:**

| You attempted to allocate an SNA (LU 6.2) conversation, but the authentication failed because the specified remote partner LUNAME will not allow authentication using just a USERID, but no password. The remote partner LUNAME is configured to require you to authenticate using both a USERID and password. You must provide a password through DB2 application logic or through DB2 Communications Database (CDB) definitions, or the partner LUNAME must be reconfigured to allow userid only authentication. For example, specify LU 6.2 SECURITY=SAME or Already-Verified.

System action: The attempt to allocate an LU6.2 conversation fails, and the error is reported to the DB2 application that requested access to the distributed resource.

| **System programmer response:**

| The reason code is issued by the local DB2 subsystem when the system notices that the remote LUNAME requires a password, but no password has been provided, by your application or through CDB definitions. You can either change the network configuration of the remote LUNAME to allow USERID only (Already Verified, Security=Same) authentication, or make local changes to provide a password that the remote LUNAME expects.

| If the remote LUNAME configuration can be changed, change the configuration of the remote LUNAME to allow Already Verified (Security=Same) authentication, which does not require a password. If the target LUNAME is a DB2 for z/OS system, support is declared by specifying SECACPT=ALREADYV on the DB2 VTAM APPL statement.

| If remote LUNAME configuration changes are not appropriate, or if a higher level of security is desired, then the local DB2 for z/OS system must honor the requirements of the remote LUNAME and provide a password. It may be possible to make application changes to provide a password, or if not, CDB changes will be required.

| If the local application is DRDA related, and if it is executing an explicit SQL Connect to the remote system, then you can consider changing the application to provide a password on the SQL Connect statement as follows:
| `CONNECT TO server USING userid USING password`

| If the local application cannot be modified to provide a password on its SQL Connect statement, or if the

| application is doing an implicit SQL Connect (the
| application refers to a three-part name, or alias, which
| resolves to the remote system), or if the application is
| using DB2 Private Protocol, then DB2 Communications
| Database tables must be changed to provide a
| password. Change the SYSIBM.LUNAMES row, which
| is associated to the partner LUNAME, to specify
| SECURITY_OUT='P' (Password) or 'R' (RACF
| passticket).

| **Note:** For password, or 'P', you must also add a
| SYSIBM.USERNAMES "outbound" rows that specifies
| the userid and its associated password. There are
| referential constraints on the SYSIBM.USERNAMES
| table that require you to also specify a
| SYSIBM.LUNAMES USERNAMES column value of 'O'
| or 'B', along with the SECURITY_OUT value of 'P'.

| See "Controlling Access to a DB2 subsystem," in Part 3
| (Volume 1) of *Administration Guide* for more
| information.

User response: Notify your DB2 system programmer.

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.

System action: The attempt to access the remote
database resource failed and the failure is reported to
the application.

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
  DSNL030I message at the remote site for the cause of
  the security failure. 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.

User response: Notify the communications database
administrator.

Problem determination: Collect the following
diagnostic items:
- Listing of the contents of the SYSIBM.IPNAMES and
  SYSIBM.LUNAMES tables at the local DB2
  subsystem and the remote DB2 subsystem.
- Listing of the contents of the SYSIBM.USERNAMES
  table at the local DB2 subsystem and the remote DB2
  subsystem.
- 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.

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.

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 DSESLIM 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 LU does not support the SNA two-phase commit process.

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.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.

- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

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 DB2 authorization ID sent by the requesting DB2 system.

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 local authorization IDs that differ from the remote DB2 authorization ID, verify that the SYSIBM.USERNAMES table has rows that correctly specify the local 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 VTAMCollect the following diagnostic items:

- Listing of the contents of the SYSIBM.IPNAMES and SYSIBM.LUNAMES tables at the local DB2 subsystem and the remote DB2 subsystem.

00D31042

Explanation: The requested VTAM function failed. The connection to the remote location was interrupted. This is an internal error.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

00D31043 • 00D31045

* Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
* Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

00D31043

Explanation: The requested VTAM function failed. The connection from the remote location was interrupted. This is an internal error.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

* Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
* Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

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.

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.

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 Part 2 of

Diagnosis Guide and Reference for information on identifying and reporting the problem.

User response: Notify the communications database administrator.

Problem determination: Collect the following diagnostic items:

* 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.
* Listing of the contents of the SYSIBM.IPNAMES and SYSIBM.LUNAMES tables at the local DB2 subsystem and the remote DB2 subsystem.
* Listing of the contents of the SYSIBM.USERNAMES table at the local DB2 subsystem and the remote DB2 subsystem.

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.

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.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the communications database administrator.

Problem determination: Collect the following diagnostic items:

* 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.
* Listing of the contents of the SYSIBM.IPNAMES and SYSIBM.LUNAMES tables at the local DB2 subsystem and the remote DB2 subsystem.
* Statistics Class 4 trace record for the LUWID associated with the failing request.
* Listing of the contents of the SYSIBM.USERNAMES table at the local DB2 subsystem and the remote DB2 subsystem.

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.

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.

Operator response: Notify the system programmer.

System programmer response: The request was rejected because the SECURITY_IN column of the SYSIBM.LUNAMES table contained a 'V' in the row associated with the remote system. The value 'V' indicates that the remote system must send both a USERID and a PASSWORD, which corresponds to SECURITY_PGM in the SNA LU6.2 architecture. 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.

If the remote LU is a member of a remote sysplex and the local system requires access to the remote sysplex, then members of the remote sysplex to be accessed must be defined in the local SYSIBM.LULIST table. In this case, the remote sysplex LU can be defined in the local SYSIBM.LULIST table although a SYSIBM.LUNAMES definition, default row or explicit definition, is appropriate in cases where it is undesirable to define the remote LU in SYSIBM.LULIST (for example when you don't want the remote LU to be a candidate member when outbound accessing the remote SYSPLEX location).

This problem can be corrected in two ways:

1. If you would like DB2 to accept requests that are marked with SECURITY=SAME, change the SECURITY_IN value in the SYSIBM.LUNAMES table to 'A' for the remote LU in question. Also the DB2 VTAM APPL definition should specify SECACPT=ALREADYV.

2. If you would like DB2 to continue to reject requests of this kind, the remote LU must be configured to send requests that contain both a USERID and PASSWORD (SECURITY=PGM in SNA LU6.2 terms).

If the remote LU is DB2, the SECURITY_OUT column in the SYSIBM.LUNAMES table must specify either 'R' or 'P' in the row associated with the local DB2 subsystem.

If you suspect an error in DB2, refer to Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the communications database administrator.

Problem determination: Collect the following diagnostic items:

- 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.
- Listing of the contents of the SYSIBM.IPNAMES and SYSIBM.LUNAMES tables at the local DB2 subsystem and the remote DB2 subsystem.
- Listing of the contents of the SYSIBM.USERNAMES table at the local DB2 subsystem and the remote DB2 subsystem.

00D31047

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 PASSWORD, or the PASSWORD was not 1 to 8 bytes in length.

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.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the communications database administrator.

Problem determination: Collect the following diagnostic items:

- 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.
- Listing of the contents of the SYSIBM.IPNAMES and SYSIBM.LUNAMES tables at the local DB2 subsystem and the remote DB2 subsystem.

- Listing of the contents of the SYSIBM.USERNAMES table at the local DB2 subsystem and the remote DB2 subsystem.
- Statistics Class 4 trace record for the LUWID associated with the failing request.

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.

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.

If the remote LU is a member of a remote sysplex and the local system requires access to the remote sysplex, then members of the remote sysplex to be accessed must be defined in the local SYSIBM.LULIST table. In this case, the remote sysplex LU can be defined in the local SYSIBM.LULIST table although a SYSIBM.LUNAMES definition, default row or explicit definition, is appropriate in cases where it is undesirable to define the remote LU in SYSIBM.LULIST (for example when you don't want the remote LU to be a candidate member when outbound accessing the remote SYSPLEX location).

A DSNL030I message may have been written to the console at the server.

Problem determination: Collect the following diagnostic items:
- Listing of the contents of the SYSIBM.IPNAMES and SYSIBM.LUNAMES tables at the local DB2 subsystem and the remote DB2 subsystem.

00D31049

Explanation: A request using application-directed access starting at site 'A' referenced an object at site 'B' that is stored at site 'A'

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.

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.

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.

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.

User response: Notify the DB2 systems programmer.

Problem determination: Collect the following diagnostic items:
- 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.

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.

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.

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.

User response: Notify the DB2 system programmer.

Problem determination: Collect the following diagnostic items:

- 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.

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.

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.

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.

User response: Contact the DB2 systems programmer.

Problem determination: Collect the following diagnostic items:

- 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.

00D3104D

Explanation: The local DB2 system does not support connectivity to the DB2 release currently running at the remote DB2 site.

System action: The attempt to allocate an SNA conversation is rejected with reason code 00D3104D.

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.

User response: Contact the DB2 systems programmer.

Problem determination: Collect the following diagnostic items:

- 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.

00D3104E

Explanation: An SNA Exchange Log Names (XLN) protocol violation was detected when attempting to establish a connection to a remote site.

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.

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.

User response: Contact the DB2 systems programmer.

Problem determination: Collect the following diagnostic items:

- 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.

00D3104F

Explanation: A connection to a remote location was lost during a previous communication operation.

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:

- 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.

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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.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem. Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00D31052

Explanation: An application caused recursive access to a remote location, followed by access to another remote location, which is not permitted.

For example, an application at location LOC1 might have connected to location LOC2 and accessed a table using an alias that resolves back to LOC1. There was a subsequent remote access from LOC1 to LOCn, which caused the error.

System action: The attempt to access the remote location fails. The SQL application receives a -904 SQLCODE.

System programmer response: Correct the application program so that it does not cause recursive access to a location followed by remote access from that location. The application might have used table aliases, three-part table names, stored procedures, user-defined functions, or triggers to cause the condition.

Problem determination: Collect the following diagnostic items:

- 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.
- Definitions of views and tables involved in the error.
- Location used in the alias entry in SYSIBM.SYSTABLES.
- Contents of the SYSIBM.LOCATIONS table.

00D31055

Explanation: The remote location defined in the SYSIBM.LOCATIONS table could not be accessed because the TCP/IP interface to DDF is not available.

System action: The request to connect to a remote site fails. The SQL application receives a -904 SQLCODE.

Operator response: Notify the system programmer.

System programmer response: One of the following actions should be taken:

- If the remote site is not supposed to be using TCP/IP, add a row to SYSIBM.LUNAMES defining the LUNAME used by the remote location.
- If the remote site is correctly defined in the CDB, examine the messages written to the console during -START DDF processing. Those messages describe any errors that would prevent DDF from using TCP/IP.
- Determine if DB2 is started in restricted access mode. If so, retry the request when DB2 has been started in full access mode.

User response: Notify the system programmer.

Problem determination: Collect the following diagnostic items:

• 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.

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00D31056

Explanation: The PORT column of the SYSIBM.LOCATIONS table could not be converted to a TCP/IP port number by the getservbyname TCP/IP socket call.

System action: The request to connect to a remote site fails. The SQL application receives a -904 SQLCODE, and message DSNL514, DSNL517, or DSNL518 is written to the console describing the error.

Operator response: Notify the system programmer.

System programmer response: Use the information in the DSNL514, DSNL517, or DSNL518 message to resolve the error.

User response: Notify the system programmer.

Problem determination: Collect the following diagnostic items:

• 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.

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00D31057

Explanation: DB2 was able to find the row in SYSIBM.LOCATIONS for the LOCATION specified in the SQL request. However, the LINKNAME column value specified in LOCATIONS did not match any row in SYSIBM.LUNAMES or SYSIBM.IPNAMES.

System action: The request to connect to a remote site fails. The SQL application receives a -904 SQLCODE.

Operator response: Notify the system programmer.

System programmer response: Insert a row in SYSIBM.LUNAMES or SYSIBM.IPNAMES that matches the LINKNAME specified in SYSIBM.LOCATIONS.

User response: Notify the system programmer.

00D31058

Explanation: The IPADDR column of the SYSIBM.IPNAMES table could not be converted to an IP address by the gethostbyname TCP/IP socket call.

System action: The request to connect to a remote site fails. The SQL application receives a -904 SQLCODE, and message DSNL513, DSNL517, or DSNL518 is written to the console describing the error.

Operator response: Notify the system programmer.

System programmer response: Use the information in

the DSNL513, DSNL517, or DSNL518 message to resolve the error.

User response: Notify the system programmer.

Problem determination: Collect the following diagnostic items:

• 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.

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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.

System programmer response: The error usually occurs due to incorrect or missing RACF definitions. To avoid this error, specify the proper RACF definitions to provide for the PassTicket. Alternatively, you may avoid the use of PassTickets by changing the SECURITY_OUT column of the SYSIBM.IPNAMES and/or SYSIBM.LUNAMES CDB table for the partner site. For information regarding PassTickets, refer to Part 3 of *Administration Guide*.

User response: Notify the system programmer.

Problem determination: Collect the following diagnostic items:

• Listing of the results produced by the SQL statements.
• Listing of the contents of the SYSIBM.IPNAMES and SYSIBM.LUNAMES tables at the local DB2 subsystem and the remote DB2 subsystem.
• Contents of the SYSIBM.LOCATIONS table.

00D3105A

Explanation: An SQL CONNECT statement was issued with a user ID and password to connect to a location that requires RACF PassTicket authorization. The connection cannot be made.

The entry in SYSIBM.LUNAMES or SYSIBM.IPNAMES for the location that is specified on the SQL CONNECT statement indicates that a connection request must contain a user ID and RACF PassTicket.

System action: The connection request is not

processed. The application is placed in the unconnected and connectable state.

User response: Change the application to eliminate its use of SQL CONNECT with a user ID and password, or remove the RACF PassTicket requirement in SYSIBM.LUNAMES or SYSIBM.IPNAMES.

00D3105B

Explanation: An SQL CONNECT statement was issued with a user ID and password to connect to a location that requires RACF encrypted password authorization. The connection cannot be made.

The entry in SYSIBM.LUNAMES for the location that is specified on the SQL CONNECT statement indicates that a connection request must contain a user ID and RACF encrypted password .

System action: The connection request is not processed. The application is placed in the unconnected and connectable state.

User response: Change the application to eliminate its use of SQL CONNECT with a user ID and password, or remove the RACF encrypted password requirement in SYSIBM.LUNAMES.

00D31100

Explanation: The data communications function service was invoked with a parameter list that contained one or more invalid parameters. This is an 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 any related diagnostic information from each connected site and the SVC dump and STS1.LOGREC at the site of a DB2 abend.

Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:
- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

00D31101

Explanation: A data communications functional service was invoked with the cursor table marked invalid. This is an 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 any related diagnostic information from each connected site and the SVC dump and SYS1.LOGREC at the site of the DB2 failure.

Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:
- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

00D31102

Explanation: A data communications functional service encountered an inconsistency in the requesting thread control block structure. This is an 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 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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:
- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

00D31103

Explanation: A data communications functional service received an invalid logical-unit-of-work ID (LUWID) or no LUWID. This is an 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 any related diagnostic information from each connected site and the SVC dump and SYS1.LOGREC as the site of the DB2 failure.

Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

00D31104

Explanation: A data communications functional service cannot find a distributed processing block for the primary thread. This is an 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 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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

00D31105

Explanation: A data communications functional service detected an invalid or incorrect buffer size on a send message operation. This is an 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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

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.

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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

00D31107

Explanation: A data communications functional service was invoked incorrectly (protocol violation) to wait for a message. This is an 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 any related diagnostic information from each connected site and the SVC dump and SYS1.LOGREC at the site of the DB2 failure.

Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

* Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
* Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

00D31108

Explanation: A data communications functional service was invoked incorrectly (protocol violation) to receive a message. This is an 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 any related diagnostic information from each connected site and the SVC dump and SYS1.LOGREC at the site of the DB2 failure.

Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

* Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
* Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

00D31109

Explanation: A data communications functional service was invoked incorrectly (protocol violation) to send a message. This is an 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 any related diagnostic information from each connected site and the SVC dump and SYS1.LOGREC at the site of the DB2 failure.

Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

* Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
* Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

00D3110A

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.

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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

* Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
* Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

00D3110B

Explanation: While a message was being sent or received by the data communications resource manager, an internal error was detected in DB2. Register 4 contains a reason code that provides additional information about this error. This is an 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 any related diagnostic information from each connected site and the SVC dump and SYS1.LOGREC at the site of the DB2 failure.

Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

00D31110

Explanation: Instrumentation facility component (IFC) has passed a nonzero return code to the data communications resource manager. This is an 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 any related diagnostic information from each connected site and the SVC dump and SYS1.LOGREC at the site of the DB2 failure.

Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

00D31111

Explanation: The instrumentation facility component (IFC) passed a nonzero return code to the data communications resource manager. This is an 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 any related diagnostic information from each connected site and the SVC dump and SYS1.LOGREC at the site of the DB2 failure.

Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

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.

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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

00D31113

Explanation: The data communications resource manager received an invalid set of control block pointers. This is an 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 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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

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.

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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

00D31115

Explanation: The data communications resource manager attempt to enqueue a request for a database access thread failed. This is an 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 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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

00D31116

Explanation: The data communications resource manager received an invalid DC message number. This is an 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 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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

00D31117

Explanation: The data communications resource manager received a request with an invalid response type. This is an 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 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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

00D31118

Explanation: A message-processing routine returned to the data communications resource manager without the requested response. This is an 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 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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

00D31119

Explanation: The data communications resource manager processed a request with an unassigned or disconnected message class. This is an 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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

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.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

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.

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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

00D3111C

Explanation: An internal logic error occurred while invoking a TCP/IP functional service.

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.

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 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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

00D3111e

Explanation: A Data Base Access Thread (DBAT) meets the requirement for becoming inactive but the MAX INACTIVE DBAT limit has already been reached.

System action: A record is written to SYS1.LOGREC, DSNL027I and DSNL028I messages have been written to SYSLOG, and the thread is terminated.

Operator response: Collect the SYS1.LOGREC listing and the SVC dump.

System programmer response: The DBAT meets the requirements for becoming inactive because a nonzero value has been specified for the MAX INACTIVE DBAT keyword in the DSNTIPR installation panel. However, the number of inactive DBATs has already reached the MAX INACTIVE DBAT limit and as a result, the DBAT is terminated with this reason code. To correct the condition, the MAX INACTIVE DBAT limit can be increased in order to allow additional inactive DBATs, or the limit can be set to zero. For more information, see the "DDF THREADS" INACTIVE description and the "MAX INACTIVE DBAT" description, for the DSNTIPR installation panel, in *Installation Guide*.

User response: Notify the system programmer.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

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 requesting application either executed an SQL statement that is 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 resumed fetching and attempted to fetch data beyond the point of truncation.

This SQLCODE can also be returned when the DRDA server system calculates the maximum amount of storage required for processing query data, and finds the requested storage exceeds the system limit.

System action: The SQL statement fails.

Operator response: Notify the system programmer.

System programmer response: Determine the failing application program and consider the following resolutions:

* The cursor definition may cause the server to return extra blocks. In this case, the cursor definition can be changed to reduce the number of rows, thus extra blocks, being returned by the server.

  DB2 for z/OS systems return extra blocks for cursors defined with the OPTIMIZER FOR n rows clause and will return only enough extra blocks in order to return n rows. When a cursor is defined with OPTIMIZER FOR n rows, either in the application or in a stored procedure, this indicates an application intent to fetch all n rows before attempting to execute other SQL statements. The application is not abiding by its intent and is executing other SQL, or committing, prior to fetching all n rows. In this case, the cursor definition can be changed to reduce the value of n, or the application logic can be modified to fetch all n rows or to close the cursor before executing the statement that caused the in-transit data to be buffered.

* The number of extra blocks returned can be controlled by DB2 installation parameters. The maximum number of extra blocks requested by a DB2 requester system is determined by the "Extra Blocks Req" option of the DSNTIP5 DB2 installation panel. This value can be reduced which prevents the server system from returning more blocks than the DB2 requester system can buffer.

  Similarly, the server system may also provide a method to regulate the maximum number of extra blocks that it will return to a requester. In this case, this number can also be reduced. For DB2 for z/OS systems, this is determined by the EXTRA BLOCKS SRV field on the DSNTIP5 DB2 installation panel.

  Examine the columns in the cursor select list. The columns in the select list can impact the amount of storage required by the DRDA server for processing query data. The cursor definition can be changed to reduce the number of columns in the select list, or the columns in the select list can be changed to have a smaller declared length in the table. Both can reduce the required storage at the DRDA server to handle the query data.

For information about block fetching result sets, see DB2 Performance Monitoring and Tuning Guide.

User response: Notify the system programmer.

Problem determination: Collect the following diagnostic items:

* Listing of the results produced by the SQL statements.
* Source listing of the failing application program.

00D31200

Explanation: DB2 thread inactivation processing failed to inactivate a database access thread (DBAT) because the DBAT's unit of recovery state was marked as "inflight". This processing occurs only when DB2 is configured with DDF Inactive Threads support (when the "DDF THREADS" field is set to "INACTIVE" in the DSNTIPR installation panel). This error is an internal error.

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, 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 Part 2 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

* Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
* Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

00D31201

Explanation: DB2 has detected an inconsistency in the TCP/IP PORT configuration parameter between the DRDA and RSYNC ports. A BIND ipaddr was specified on the DRDA PORT statement in the PROFILE.TCPIP data set but the BIND ipaddr was not specified on the RSYNC PORT statement in the PROFILE.TCPIP data set. When using dynamic virtual IP addresses (VIPA), DB2 requires both the DRDA PORT and RSYNC PORT to be configured to use a VIPA.

System action: DDF is abnormally terminated.

System programmer response: If using dynamic VIPA to bind to a DB2 PORT number, verify that a VIPA is defined for both the DRDA PORT number and RSYNC PORT number by specifying the BIND ipaddr on the PORT statement in the PROFILE.TCPIP data set used to reserve the PORTs for DB2. If not using dynamic VIPA to bind to DB2 PORT, remove the BIND ipaddr option

on the PORT statement in the PROFILE.TCPIP data set used to reserve the PORT numbers for DB2. After fixing the TCP/IP PORT configuration statements, start DDF.

00D31202

Explanation: DB2 has detected an inconsistent change in the TCP/IP PORT configuration parameter for the RSYNC PORT. A BIND ipaddr specified on the RSYNC PORT statement was changed in the PROFILE.TCPIP data set since DDF was started.

System action: DDF is abnormally terminated. This change can cause outages because of invalid sysplex routing information or commit resynchronization failures due to invalid IP addresses being returned to requesters.

System programmer response: Verify the BIND ipaddr specified on the RSYNC PORT number in the TCP/IP PORT statement and start DDF.

00D31203

Explanation: A conversation was not allocated for one of these reasons:

- The LINKNAME was present in the SYSIBM.IPLIST table, but not in the SYSIBM.IPNAMES table.
- The IP Address contained in the IPADDR column of SYSIBM.IPLIST table was also present in the IPADDR column of SYSIBM.IPNAMES table. A given IP Address can appear in only one of these two tables.

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 LINKNAME in SYSIBM.IPLIST table is also defined in SYSIBM.IPNAMES table. Make sure the IP Address is specified in the IPADDR column of SYSIBM.IPLIST table and a blank value is specified in the IPADDR column of SYSIBM.IPNAMES table.

Problem determination: Collect the following diagnostic items:

- Print the contents of the SYSIBM.IPNAMES table.
- Print the contents of the SYSIBM.IPLIST table.

00D31204

Explanation: An outbound TCP/IP connection requires the use of IPv6 addressing but TCP/IP is not configured to support IPv6 addressing.

System action: Notification of the failure is returned to the application.

System programmer response: The Communications Database (CDB) registration of the remote partner indicates that an IPv6 address is to be used. That is, the location name being accessed by the application SQL refers to a SYSIBM.LOCATIONS row. The SYSIBM.LOCATIONS row contains a LINKNAME that refers to a SYSIBM.IPNAMES row. The SYSIBM.IPNAMES row contains an IPADDR value that indicates the use of IPv6 addressing, either by explicitly specifying an IPv6 address or by referring to a domain name that resolves to an IPv6 address.

You must choose of the following actions:

- Configure TCP/IP to support IPv6 addressing.
- Make configuration changes to refer to only IPv4 addresses.

To configure TCP/IP to support IPv6 addressing, you must first ensure that TCP/IP is configured to use a dual-mode IPv4 and IPv6 stack - the BPXPRMxx PARMLIB member must be modified to allow TCP/IP to behave as a dual-mode stack. Other TCP/IP configuration changes are also required to define the IPv6 address. You can verify that IPv6 addressing is correctly defined for DB2 purposes if the DB2 Display DDF command report, issued after DDF is started, provides an IPv6 address.

If TCP/IP cannot be configured to support IPv6 addressing, you can only refer to IPv4 addresses. If the IPADDR column, of the SYSIBM.IPNAMES CDB table, specifies an IPv6 address, you must change the IPADDR column to refer to an IPv4 address. If the IPADDR column specifies a domain name that resolves to an IPv6 address by the Domain Name Server (DNS), you must modify the DNS to resolve the domain name to an IPv4 address.

Make the appropriate changes and rerun the application.

00D31205

Explanation: A secure connection could not be established using z/OS Application Transparent-Transport Layer Security (AT-TLS). The reason that this code was issued depends on whether the connection attempt was inbound or outbound:

Inbound connections
> DB2 has detected an invalid use of a secure port. A non-secure TCP/IP connection is attempting to access DB2 using a secure port without an AT-TLS policy established for the connection.

Outbound connections
> DB2 cannot establish a secure connection with the remote location.

System action: The system action depends on whether the connection was inbound or outbound:

Inbound connections
> The attempted connection request is

terminated. If no instance of message DSNL030I has been written to the system console in the preceding five minutes, message DSNL030I is written to the system console.

Outbound connections
The request to connect to the remote site fails. The SQL application receives SQLCODE -904.

System programmer response: z/OS AT-TLS transparently performs transport layer security (TLS) on behalf of DB2 by invoking the z/OS System Secure Socket Layer (SSL) in the TCP transport layer. AT-TLS uses a policy-based configuration, and the Policy Agent application is required to define AT-TLS rules and actions to the TCP/IP stack for TCP connections.

1. Use the reports generated by the z/OS UNIX pasearch and TCP/IP NETSTAT TTLS commands to verify that an AT-TLS policy exists and has been defined for the appropriate port.

   Inbound connections
   The secure port that DB2 uses for accepting secure TCP/IP connections.

   Outbound connections
   The remote port that DB2 uses to establish a secure TCP/IP connection with the remote location.

2. Ensure that AT-TLS is enabled for this connection.

User response: Verify that the correct port number has been specified for the connection to the target server. For a secure connection, the port number should be the target DB2 SECURE PORT, in which case an AT-TLS policy is required.

If you want to access DB2 without a secure connection, specify the DB2 DRDA PORT.

Related reference

➡ AT-TLS policy statements (z/OS Communications Server: IP Configuration Reference)

➡ The z/OS UNIX pasearch command: Display policies (z/OS Communications Server: IP System Administrator's Commands)

➡ Netstat TTLS/-x report (z/OS Communications Server: IP System Administrator's Commands)

Related information

➡ DSNL030I (DB2 Messages)

"-904" on page 137

00D31206

Explanation: The MAXFILEPROC limit was exceeded and the thread was not allowed to connect to DB2.

System action: The requester is not connected to DB2.

Operator response: Notify the system programmer.

System programmer response: The maximum number

of sockets that can be opened concurrently is defined by the installation option MAXFILEPROC. When the MAXFILEPROC limit is exceeded, threads are not allowed to connect to DB2. This message will be issued by DSNLILNR if DB2 is acting as the server listening on a socket and the conversation was abnormally deallocated or by DSNLIAAC when DB2 is acting as the requester initiating a connection and the connection was not allocated.

Make the appropriate changes and rerun the application.

Problem determination: Analyze the statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message. For the DB2 system generating the DSNL032I message, collect the following diagnostic items:

• Statistics Class 4 trace record for the LUWID associated with the failing request.

In addition, identify all connected systems participating in the processing of the remote request. This includes the requester system to which the application is connected and the data server which is the target of the remote request. This may also include intermediate server systems. For each system that is a DB2 system, collect the following diagnostic items:

• Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.

For non-DB2 systems, refer to the documentation specific to those products for diagnostic procedures.

If any dumps were generated on any DB2 system participating in processing the remote request, collect the following diagnostic items:

• Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

• All dumps created by this failure.

00D34401

Explanation: The relational data system (RDS) passed an invalid function code to the distributed RDS (DRDS). This is an 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 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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

00D34404

Explanation: The relational data system (RDS) passed the distributed RDS (DRDS) an invalid distributed interface block (DIB). This is an internal RDS 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 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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

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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.

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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

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.

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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

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 a DCRM 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 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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

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.

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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

00D34409

Explanation: The distributed relational data system (DRDS) detected an internal inconsistency. An invalid state transition occurred. This is a DRDS 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 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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

00D3440B

Explanation: The distributed relational data system (DRDS) detected an inconsistency. This is an internal error.

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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

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.

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 part 2 of *Diagnosis Guide and*

00D3440D • 00D34411

Reference for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

00D3440D

Explanation: The distributed statistics and accounting control block does not exist. This is an internal distributed data facility (DDF) 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 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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

00D3440E

Explanation: A distributed request was received, but the distributed data facility (DDF) is inactive.

System action: The request is not processed.

Operator response: Ensure that the DDF has been started.

User response: Notify the system operator.

00D3440F

Explanation: The distributed relational data system (DRDS) detected a message of invalid length from the data communications resource manager (DCRM). The message is smaller than the buffer size, but the return code from the DCRM indicates that the message is greater than one buffer. This is either an internal DRDS error or an internal DCRM 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 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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

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.

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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

00D34411

Explanation: The distributed relational data system (DRDS) detected an internal inconsistency. An invalid state is specified. This is an internal DRDS 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 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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

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.

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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

00D34413

Explanation: The data header on the message received from the responding site contains invalid information. This is an 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 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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

00D34414

Explanation: The relational data system (RDS) did not specify an area for the null indicator of the data. This is an 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 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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

00D34415

Explanation: The input host variable SQLDA format specified in the RDI is not valid. This is an 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 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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

00D34416

Explanation: An incomplete response was received on a conversation when a complete response was expected.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

00D34417

Explanation: DRDS detected an illegal attempt to enter Continuous Block Fetch mode.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

00D34418

Explanation: The connection to the remote server failed. The SYSIBM.USERNAMES table did not contain an outbound row and did not specify the remote authorization ID for the plan owner DB2 authorization ID. When the USERNAMES column in SYSIBM.LUNAMES is specified as 'O' or 'B', outbound name translation is in use. The SYSIBM.USERNAMES table must contain entries that describe the remote authorization IDs that are used for each DB2 authorization ID that communicates with the LU.

System action: A response is sent to the application to indicate that the resource is unavailable. 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 is 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 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: 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.

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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

00D3441C

Explanation: Allocation of the distributed processing services block (DPSB) failed.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

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.

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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

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.

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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

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.

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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

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.

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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

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 generate a request. 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 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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

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.

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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.

- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

00D34425

Explanation: The distributed relational data system (DRDS) subcomponent has received an unexpected return code from the Data Communications Resource Manager (DC) subcomponent. 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 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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

00D34426

Explanation: The distributed relational data system (DRDS) subcomponent has detected an invalid date format in DSNHDECP. 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 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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.

- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

00D34427

Explanation: The distributed relational data system (DRDS) subcomponent has detected an invalid time format in DSNHDECP. 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 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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

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00D34428

Explanation: DB2, acting as a DRDA server, has detected an error while parsing a DRDA command and its command data objects and has generated a DRDA exception.

An EXCSQLSTT command was received with the parameter OUTEXP set to TRUE, but the requester has not sent any parameter data. DB2 returns a SYNTAXRM to the requester, writes an IFCID 195 trace record, and generates a DSNL032I console message.

System action: Message DSNL032I is written to the console. A DDM reply message is returned to the requester system.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to *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 DSNL032I message.

At the DB2 DRDA server system generating the message, collect the following diagnostic items:

00D34429 • 00D3442E

| • Statistics Class 4 trace record for the LUWID associated with the failing request.

| If the requester system is a DB2 for z/OS system, collect the following diagnostic items:

| • 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.
| • All dumps taken by the attachment facility or requesting application.
| **Related information**

| ➡ DSNL032I (DB2 Messages)

00D34429

Explanation: The distributed relational data system (DRDS) subcomponent has detected that the call type in the RDI is invalid. 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 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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

• Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
• Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

00D3442B

Explanation: The distributed relational data system (DRDS) subcomponent has received a nonzero SQL return code from an invocation of the parser. 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 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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

• Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
• Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

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00D3442E

Explanation: The distributed relational data system (DRDS) subcomponent has detected an inconsistency processing a request using Distributed Relational Database Architecture™ (DRDA) 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.

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 +30100 for this operation.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *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 this local DB2, collect the following diagnostic items:

• 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.
• Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
• Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

00D3442F

Explanation: The distributed relational data system (DRDS) subcomponent has detected an inconsistency processing a request using Distributed Relational Database Architecture (DRDA) at the local DB2.

The inconsistency may manifest itself as follows:

- In the processing of an embedded SELECT SQL statement, a prior execution of this embedded SELECT SQL statement resulted in a SQLDTARD that is NOT the same as the SQLDTARD received on the current execution of this SQL statement.
- In the processing of an OPEN cursor SQL statement, a prior description of the resultant data, obtained either as a result of a PREPARE or a prior execution of this SQL statement is NOT the same as the description of the resultant data that was received on the current execution of this SQL statement.

The data length, the data type and CCSID of each column of resultant data is checked for consistency.

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 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 Part 2 of *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:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At the remote server, collect the following items:

- 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.
- All dumps taken by the attachment facility or requesting application.

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.

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.

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.

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the BB2 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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

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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.

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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

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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.

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 Distributed Relational Database Architecture (DRDA) 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.

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 Part 2 of *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:

- 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.

- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Statistics Class 4 trace record for the LUWID associated with the failing request.

At the remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

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.

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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

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 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.

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 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.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.

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.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 every possible remote authorization ID.

Problem determination: Analyze the SYSIBM.USERNAMES table for an incorrect or missing entry.

00D3443F

Explanation: The connection to the remote server failed. The SYSIBM.USERNAMES table did not contain an outbound row and did not specify the remote authorization ID for the package owner DB2 authorization ID. When the USERNAMES column in SYSIBM.LUNAMES or SYSIBM.IPNAMES is specified as 'O' or 'B', outbound name translation is in use. The SYSIBM.USERNAMES table must contain entries that describe the remote authorization IDs that are used for each DB2 authorization ID that communicates with the LU or the TCP/IP address.

System action: A response is sent to the application to

indicate that the resource is unavailable. 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 or SYSIBM.IPNAMES is specified correctly for the indicated LUNAME or IPADDR. If you intend to use remote authorization IDs that differ from the DB2 authorization IDs, verify that the SYSIBM.USERNAMES table has rows that 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: Analyze the SYSIBM.USERNAMES table for an incorrect or missing entry.

00D34440

Explanation: A timeout or deadlock was detected during remote bind processing. This can occur during BIND, REBIND, or FREE.

System action: The BIND is not successful.

System programmer response: None is required.

User response: Reissue the BIND subcommand.

Problem determination: Collect the following diagnostic items:

- 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.

00D34441

Explanation: DB2, acting as a DRDA server, has detected an error while parsing a DRDA command and its command data objects and has generated a DRDA exception. One of the following error conditions might have occurred:

- An EXCSQLSTT command was received specifying a stored procedure name (PRCNAM), but the statement is not a stored procedure call. DB2 returns a CMDCHKRM to the requester.
- An EXCSQLIMM or EXCSQLSTT command was received from the requester specifying an invalid QRYINSID instance variable. DB2 returns a VALNSPRM to the requester, writes an IFCID 192 trace record, and generates a DSNL032I console message.

System action: Message DSNL032I is written to the console. A DDM reply message is returned to the requester system.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to *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 DSNL032I message.

At the DB2 DRDA server system generating the message, collect the following diagnostic items:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

If the requester system is a DB2 for z/OS system, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

Related information

⮕ DSNL032I (DB2 Messages)

00D34442

Explanation: The distributed relational data system (DRDS) subcomponent has detected an inconsistency processing a request using Distributed Relational Database Architecture (DRDA) at the local DB2.

The local DB2 has received an ENDUOWRM that indicates that the remote server processed a dynamic ROLLBACK request successfully; however, the server should not have processed the ROLLBACK for one of the following reasons:

- The server was not available to update
- The server was participating in two phase commit protocols with the current request

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 -904 for this operation. The connection to the server will be terminated.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Examine the trace record associated with the LUWID of the failing request 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.

For the local DB2 that made the request, collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Statistics Class 4 trace record for the LUWID associated with the failing request.

For the remote server that received the request, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

00D34445

Explanation: The distributed relational data system (DRDS) subcomponent detected an error while processing a DDM CNTQRY command received from a remote requester.

A previous CNTQRY command specified a QRYROWSET parameter, which indicated the number of rows to be returned as a rowset. Because of the blocking limits in effect with the requester, only a partial rowset was returned to the requester. Some rows in the requested rowset are still unfetched and are pending. The DRDA rules require that this subsequent CNTQRY command must either:

- Specify a QRYROWSET value that is equal to the number of pending rows in the rowset.
- Reset the query blocks from the pending rowset

The CNTQRY command did not specify the QRYRSTBLK parameter to reset the query blocks, so this command is assumed to completes the pending rowset. Because the requested QRYROWSET value does not equal the number of pending rows in the rowset that was requested by the previous CNTQRY, a DRDA exception occured.

System action: Message DSNL032I is written to the console, and a DDM reply message (PRCCNVRM) is returned to the requester system.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Analyze the statistics class 4 trace record that is identified by the IFCID sequence number that is enumerated in the DSNL032I message.

If the requester system is a DB2 for z/OS system, collect the following diagnostic items:

- 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.
- Statistics Class 4 trace record for the LUWID associated with the failing request.
- All dumps taken by the attachment facility or requesting application.

At the DB2 server system that generated the DSNL032I message, collect the following diagnostic items:

- 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.
- Statistics Class 4 trace record for the LUWID associated with the failing request.
- All dumps taken by the attachment facility or requesting application.

Related information

 ⇨ DSNL032I (DB2 Messages)

00D34447

Explanation: The distributed relational data system (DRDS) subcomponent detected an error while processing a DDM CNTQRY command received from a remote requester. If either or both the OPNQRY command and the first CNTQRY command specified QRYROWSET parameter, then all subsequent CNTQRY commands must specify the QRYROWSET parameter explicitly. The CNTQRY command did not specify a QRYROWSET parameter as required by the DRDA rules and a DRDA exception occurred.

System action: Message DSNL032I is written to the console, and a DDM reply message (PRCCNVRM) is returned to the requester system.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Analyze the statistics class 4 trace record that is identified by the IFCID sequence number that is enumerated in the DSNL032I message.

If the requester system is a DB2 for z/OS system, collect the following diagnostic items:

- 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.
- Statistics Class 4 trace record for the LUWID associated with the failing request.
- All dumps taken by the attachment facility or requesting application.

At the DB2 server system that generated the DSNL032I message, collect the following diagnostic items:

- 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.
- Statistics Class 4 trace record for the LUWID associated with the failing request.
- All dumps taken by the attachment facility or requesting application.

Related information

DSNL032I (DB2 Messages)

00D34448

Explanation: The distributed relational data system (DRDS) subcomponent detected an error while processing a DDM CNTQRY command received from a remote requester. If both the OPNQRY command and the first CNTQRY command did not specify the QRYROWSET parameter, then subsequent CNTQRY commands must not specify the QRYROWSET parameter. The CNTQRY command specified a QRYROWSET parameter which is prohibited by the DRDA rules and a DRDA exception occurred.

System action: Message DSNL032I is written to the console, and a DDM reply message (PRCCNVRM) is returned to the requester system.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Analyze the statistics class 4 trace record that is identified by the IFCID sequence number that is enumerated in the DSNL032I message.

If the requester system is a DB2 for z/OS system, collect the following diagnostic items:

- 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.
- Statistics Class 4 trace record for the LUWID associated with the failing request.
- All dumps taken by the attachment facility or requesting application.

At the DB2 server system that generated the DSNL032I message, collect the following diagnostic items:

- 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.
- Statistics Class 4 trace record for the LUWID associated with the failing request.
- All dumps taken by the attachment facility or requesting application.

Related information

DSNL032I (DB2 Messages)

00D34449

Explanation: The distributed relational data system (DRDS) subcomponent detected an error while processing a DDM CNTQRY command received from a remote requester. Scrolling parameters (such as QRYSCRORN, QRYROWNBR, QRYROWSNS, QRYBLKRST, QRYRTNDTA) were specified on the CNTQRY command, but one of the following conditions exists:

- The cursor is not scrollable.
- The cursor is scrollable, but it is being accessed by the requester in a non-scrollable manner. (Neither the OPNQRY command nor the first CNTQRY command specified the QRYROWSET parameter.)

A DRDA exception occurred.

System action: Message DSNL032I is written to the console, and a DDM reply message (PRCCNVRM) is returned to the requester system.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Analyze the statistics class 4 trace record that is identified by the IFCID sequence number that is enumerated in the DSNL032I message.

If the requester system is a DB2 for z/OS system, collect the following diagnostic items:

- 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.
- Statistics Class 4 trace record for the LUWID associated with the failing request.
- All dumps taken by the attachment facility or requesting application.

At the DB2 server system that generated the DSNL032I message, collect the following diagnostic items:

- 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.
- Statistics Class 4 trace record for the LUWID associated with the failing request.
- All dumps taken by the attachment facility or requesting application.

Related information

DSNL032I (DB2 Messages)

00D3444A

Explanation: The distributed relational data system (DRDS) subcomponent detected an error while processing a DDM CNTQRY command received from a remote requester. The CNTQRY is fetching data from a scrollable cursor which is being accessed in a scrollable manner by the requester. The CNTQRY command will return one or more LOB columns as LOB data, but the RTNEXTDTA parameter on the CNTQRY command (indicating how LOB values are to be returned) did not specify RTNEXTALL as required by the DRDA rules. A DRDA exception is generated.

System action: Message DSNL032I is written to the console, and a DDM reply message (PRCCNVRM) is returned to the requester system.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Analyze the statistics class 4 trace record that is identified by the IFCID sequence number that is enumerated in the DSNL032I message.

If the requester system is a DB2 for z/OS system, collect the following diagnostic items:

- 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.
- Statistics Class 4 trace record for the LUWID associated with the failing request.
- All dumps taken by the attachment facility or requesting application.

At the DB2 server system that generated the DSNL032I message, collect the following diagnostic items:

- 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.
- Statistics Class 4 trace record for the LUWID associated with the failing request.
- All dumps taken by the attachment facility or requesting application.

Related information

⮕ DSNL032I (DB2 Messages)

00D3444C

Explanation: The distributed relational data system (DRDS) subcomponent detected an error while processing a DDM CNTQRY command received from a remote requester. A previous CNTQRY command specified a QRYROWSET parameter, indicating the number of rows to be returned as a rowset. Because of the blocking limits in effect with the requester, only a partial rowset was returned to the requester and a

number of rows in the requested rowset are still unfetched, and remain in pending state. The DRDA rules require that this subsequent CNTQRY command either reset the pending query blocks by means of the QRYRSTBLK parameter or must explicitly or implicitly specify a FETCH NEXT orientation (RELATIVE+1) to complete the pending rowset.The CNTQRY command did not reset the pending rowset and did not specify the FETCH NEXT orientation, resulting in a DRDA exception.

System action: The 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 requester system.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *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 DSNL032I message.

If the requester system is a DB2 for z/OS system, collect the following diagnostic items:

- 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.
- Statistics Class 4 trace record for the LUWID associated with the failing request.
- All dumps taken by the attachment facility or requesting application.

At the DB2 server system generating the message, collect the following diagnostic items:

- 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.
- Statistics Class 4 trace record for the LUWID associated with the failing request.
- All dumps taken by the attachment facility or requesting application.

00D3444F

Explanation: Acting as a DRDA server, DB2 has detected an error while parsing an SQLDTA object received from a DRDA requester system. The total FDODTA object length, as determined by parsing the individual data items in the FDODTA object, is smaller than the stated length of the FDODTA object itself.

System action: The system generates an alert and returns message DSNL032I. Refer to the description of this message for further information. A DDM reply

00D34450

message (SYNTAXRM) is returned to the requester system.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: You should analyze the statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message.

At the DB2 for z/OS DRDA server, collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

If the requester is a DB2 for z/OS system, collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

were issued. Make sure that MSGLEVEL=(1,1) on the JOB statement so that all diagnostic information is sent to SYSPRINT.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00D35000

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.

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 Part 2 of *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.

00D35011

Explanation: The distributed data interchange system (DDIS) component detected an internal error. 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 abend. Messages DSNL027 and DSNL028 are written to the console. If the conversation is terminated as a result of the abend, DSNL500I is also written.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Identify all connected systems participating in the processing of the remote request. This includes the requester system to which the application is connected and the data server which is the target of the remote request. This may include intermediate server systems. 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.

For each connected system that is a DB2 system collect the diagnostic items:
- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.
- All dumps created by this failure.

For non-DB2 systems, refer to the documentation specific to those products for diagnostic procedures.

00D35030

Explanation: DB2, acting as a DRDA server, detected an error while processing an SQL request from a remote DRDA client. DB2 was building a DDM query descriptor (QRYDSC or FDODSC) to return to the DRDA client, but could not do so because the descriptor required more late environment descriptors (LEDs) than DB2 can support.

System action: The DBAA is abended. The conversation with the remote site is terminated. At the server console, the DSNL027I message is issued, accompanied by one or more DSNL028I messages identifying all remote sites where the distributed agent also exists and where diagnostic information might also be collected.

Operator response: Notify the application programmer or user creating the SQL statement.

If the remote DRDA client is a DB2 for MVS system, collect the following diagnostic items:
- Statistics Class 4 trace record for the LUWID associated with the failing request.

For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At DB2 DRDA server, collect the following diagnostic items:
- 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.
- All dumps taken by the attachment facility or requesting application.

User response: The SQL request issued by the client

cannot be processed by DB2. As a circumvention, the SQL request can be simplified to reduce the number of LEDs required to describe the data using DRDA. LEDs may be required, for example, if columns being fetched are in a different code page (CCSID) than the default CCSID for the DB2 for MVS system.

00D35101

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 level 6b object, other than a Reply DSS or an Object DSS, is invalid.

DB2 may be acting as a requester system for a local application or may be acting as an intermediate DRDA system for a remote application on another DRDA requester system.

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 Part 2 of *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. For the DB2 system generating the DSNL031I message, collect the following diagnostic items:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

In addition, identify all connected systems participating in the processing of the remote request. This includes the requester system to which the application is connected and the data server which is the target of the remote request. This may also include intermediate server systems. For each system that is a DB2 system, collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.

For non-DB2 systems, refer to the references specific to those products.

If any dumps were generated on any DB2 system participating in processing the remote request, collect the following diagnostic items:

- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.
- All dumps created by this failure.

00D35102

Explanation: DB2 has detected an error in the DDM reply data object received from the remote server in response to a DDM command. The object, carried in a level 6b OBJDSS, is not defined as valid for DDM level 3.

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 -30072 and SQLSTATE 58016.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

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 nonrepeatable, have been returned.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

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.

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 Part 2 of *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.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

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.

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 Part 2 of *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. For the DB2 system generating the DSNL031I message, collect the following diagnostic items:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

In addition, identify all connected systems participating in the processing of the remote request. This includes the requester system to which the application is connected and the data server which is the target of the remote request. This may also include intermediate

server systems. For each system that is a DB2 system, collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.

For non-DB2 systems, refer to the references specific to those products.

If any dumps were generated on any DB2 system participating in processing the remote request, collect the following diagnostic items:

- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.
- All dumps created by this failure.

00D35107

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. One or more DDM reply data objects, defined by DDM Level-3 as required for the DDM command, were not received.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

00D35108

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 FDODSC scalar, contained

within the SQLDTARD, exceeds 32KB. The DDM extended length field required to support this is invalid. The SQL operation is a SELECT and the size of the FDODSC object, contained within the SQLDTARD collection, exceeds 32KB. The DDM extended length field required to support this is invalid.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

00D35109

Explanation: DB2 has detected an error in the DDM SQLDTARD reply data object received in response to a DDM EXCSQLSTT 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 FDODSC element, describing the single row, is not contained within the SQLDTARD reply data object.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

00D3510A

Explanation: DB2 has detected an error in the DDM SQLDTARD reply data object received in response to a DDM EXCSQLSTT command. The DDM SQLDTARD object is a collection consisting of the FDODSC and FDODTA scalars. The FDODTA scalar, containing the single row described by the FDODSC, is not contained within 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.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

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 FDODTA 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.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

00D3510C

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 SQL operation is a SELECT and the size of the SQLDTARD, a DDM collection consisting of the FDODSC and FDODTA scalars, SQLDTARD is greater than the sum of the lengths of the constituent FDODSC and FDODTA scalars. The object is invalid.

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 Part 2 of *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:
- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:
- 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.
- All dumps taken by the attachment facility or requesting application.

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.

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 Part 2 of *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:
- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:
- 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.
- All dumps taken by the attachment facility or requesting application.

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.

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 Part 2 of *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:
- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:
- 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.
- All dumps taken by the attachment facility or requesting application.

00D3510F

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 TYPDEFOVR collection signaling a remote server change in CCSIDs. The length of one of the constituent scalars, CCSIDSBC, CCSIDMBC or CCSIDDBC is incorrect.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

00D35110

Explanation: DB2 has detected an error in the DDM TYPEDEFOVR reply data object received from the remote server in response to a DDM command, signaling a change in the remote server CCSIDs. The TYPEDEFOVR contains multiple occurrences of the CCSIDSBC scalar (SBCS CCSID). This is an error. The DDM object is a TYPDEFOVR collection signaling a remote server change in CCSIDs. The CCSIDSBC (SBCS CCSID) code point is invalid.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

00D35111

Explanation: DB2 has detected an error in the DDM TYPEDEFOVR reply data object received from the remote server response to a DDM command, signaling a change in the remote server CCSIDs. The TYPEDEFOVR contains multiple occurrences of the CCSIDSBC scalar (MIXED CCSID). This is an error. The DDM object is a TYPDEFOVR collection signaling a remote server change in CCSIDs. The CCSIDMBC (MIXED CCSID) code point is invalid.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

00D35112

Explanation: DB2 has detected an error in the DDM TYPEDEFOVR reply data object received from the remote server in response to a DDM command, signaling a change in the remote server CCSIDs. The TYPEDEFOVR contains multiple occurrences of the CCSIDSBC scalar (GRAPHIC CCSID). This is an error. The DDM object is a TYPDEFOVR collection signaling a remote server change in CCSIDs. The CCSIDDBC (GRAPHIC CCSID) code point is invalid.

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 Part 2 of *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:
* Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:
* 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.
* All dumps taken by the attachment facility or requesting application.

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 DDM object is a TYPDEFOVR collection signaling a remote server change in CCSIDs. The DDM object length is invalid.

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 Part 2 of *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:
* Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:
* 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.
* All dumps taken by the attachment facility or requesting application.

00D35114

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.

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 Part 2 of *Utility 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.

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 Part 2 of *Utility 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.

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 DDM reply message is not valid for the current command.

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 Part 2 of *Utility 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.

00D35117

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.

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 Part 2 of *Utility 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.

00D35118

Explanation: DB2 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 data object (that is, the level of DDM required to support the object) exceeds the DDM level of the AS specified during CONNECT processing.

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 -30020 and SQLSTATE 58009.

Operator response: Notify the system programmer.

System programmer response: Refer to *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 DSNL031I message.

At this local DB2, collect the following diagnostic items:
* Statistics Class 4 trace record for the LUWID associated with the failing request.

00D35119

Explanation: DB2 detected an error in the DDM reply message 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.

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 received SQLCODE -30020 and SQLSTATE 58009.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *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 DSNL031I message.

At this local DB2, collect the following diagnostic items:
- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:
- 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.
- All dumps taken by the attachment facility or requesting application.

00D3511A

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 SQLCARD or SQLDTARD reply data object, and a DDM SQLRSLRD reply data object. Neither the SQLCARD nor the SQLDTARD is contained in the summary component.

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 Part 2 of *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:
- 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.

- Statistics Class 4 trace record for the LUWID associated with the failing request.

If the DRDA server is DB2 for z/OS, then DB2 diagnostic information is available. In this case, at the DB2 server, collect the following diagnostic items:
- 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.

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 SQLCARD or SQLDTARD reply data object, and a DDM SQLRSLRD reply data object. The SQLRSLRD object is not contained in the summary component.

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 Part 2 of *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:
- 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.
- Statistics Class 4 trace record for the LUWID associated with the failing request.

If the DRDA server is DB2 for z/OS, then DB2 diagnostic information is available. In this case, at the DB2 server, collect the following diagnostic items:
- 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.

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 SQLCARD or SQLDTARD reply data object, and a DDM SQLRSLRD reply data object. The SQLRSLRD reply data object was not preceded by the RSLSETRM reply message.

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 Part 2 of *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:

- 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.
- Statistics Class 4 trace record for the LUWID associated with the failing request.

If the DRDA server is DB2 for z/OS, then DB2 diagnostic information is available. In this case, at the DB2 server, collect the following diagnostic items:

- 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.

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 SQLCARD or SQLDTARD reply data object, and a DDM SQLRSLRD 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 SQLRSLRD object.

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 Part 2 of *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:

- 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.
- Statistics Class 4 trace record for the LUWID associated with the failing request.

If the DRDA server is DB2 for z/OS, then DB2 diagnostic information is available. In this case, at the DB2 server, collect the following diagnostic items:

- 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.

00D3511E

Explanation: DB2 has detected an error in the DDM QRYDTA reply data object received in response to a DDM OPNQRY or CNTQRY command. The SQL operation is a FETCH and the size of the QRYDTA object, exceeds 32KB. The DDM length field required to support this is invalid.

DB2 may be acting as a requester system for a local application or may be acting as an intermediate DRDA system for a remote application on another DRDA requester system.

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 Part 2 of *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. For the DB2 system generating the DSNL031I message, collect the following diagnostic items:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

In addition, identify all connected systems participating in the processing of the remote request. This includes the requester system to which the application is connected and the data server which is the target of the remote request. This may also include intermediate

server systems. For each system that is a DB2 system, collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.

For non-DB2 systems, refer to the references specific to those products.

If any dumps were generated on any DB2 system participating in processing the remote request, collect the following diagnostic items:

- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.
- All dumps created by this failure.

00D3511F

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 MGRLVLOVR collection signaling a remote server change in DRDA manager levels. The DDM object length is invalid.

DB2 may be acting as a requester system for a local application or may be acting as an intermediate DRDA system for a remote application on another DRDA requester system.

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 Part 2 of *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. For the DB2 system generating the DSNL031I message, collect the following diagnostic items:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

In addition, identify all connected systems participating in the processing of the remote request. This includes the requester system to which the application is connected and the data server which is the target of the remote request. This may also include intermediate server systems. For each system that is a DB2 system, collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.

For non-DB2 systems, refer to the references specific to those products.

If any dumps were generated on any DB2 system participating in processing the remote request, collect the following diagnostic items:

- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.
- All dumps created by this failure.

00D35120

Explanation: DB2 has detected an error in the DDM TYPDEFOVR reply data object received from the remote server in response to a DDM command, signaling a change in the remote server CCSIDs. The TYPDEFOVR contains multiple occurrences of the CCSIDXML scalar (XML CCSID). This is an error. The CCSIDXML (XML CCSID) code point is invalid.

DB2 may be acting as a requester system for a local application or may be acting as an intermediate DRDA system for a remote application on another DRDA requester system.

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 Part 2 of *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. For the DB2 system generating the DSNL031I message, collect the following diagnostic items:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

In addition, identify all connected systems participating in the processing of the remote request. This includes the requester system to which the application is connected and the data server which is the target of the remote request. This may also include intermediate server systems. For each system that is a DB2 system, collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.

For non-DB2 systems, refer to the references specific to those products.

If any dumps were generated on any DB2 system participating in processing the remote request, collect the following diagnostic items:

- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.

- All dumps created by this failure.

00D35121

Explanation: DB2 has detected an error in the DDM reply data object that was received in response to a DDM EXSQLSTT, OPNQRY, or CNTQRY command. The SQL operation is a FETCH and the DDM object is a streamed object, but is not a QRYDTA object. DB2 might be acting as a requester system for a local application or as an intermediate DRDA system for a remote application on another DRDA requester system.

System action: An alert is generated and message DSNL031I is written to the console.

The application receives SQLCODE -30020 and SQLSTATE 58009.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination:

- Analyze the statistics class 4 trace record that is identified by the IFCID sequence number that is enumerated in the DSNL031I message. For the DB2 system generating the DSNL031I message, collect the following diagnostic items:
  - Statistics Class 4 trace record for the LUWID that is associated with the failing request.
- Identify all connected systems that are participating in the processing of the remote request, including:
  - The requester system to which the application is connected
  - The data server that is the target of the remote request
  - Any intermediate server systems

  For each system that is a DB2 system, collect the following diagnostic items:
  - The console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- For non-DB2 systems, refer to the references specific to those products.
- If any dumps were generated on any DB2 system that is participating in processing the remote request, collect the following diagnostic items:
  - The listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.
  - All dumps generated by this failure.

Related information

⤷ DSNL031I (DB2 Messages)
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00D35122

Explanation: DB2 has detected an error in the DDM reply data object that was received in response to a DDM EXSQLSTT, OPNQRY, or CNTQRY command. The SQL operation is a FETCH and the DDM object is a streamed object, but is not the only object in the OBJDSS. DB2 might be acting as a requester system for a local application or as an intermediate DRDA system for a remote application on another DRDA requester system.

System action: An alert is generated and message DSNL031I is written to the console.

The application receives SQLCODE -30020 and SQLSTATE 58009.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination:

- Analyze the statistics class 4 trace record that is identified by the IFCID sequence number that is enumerated in the DSNL031I message. For the DB2 system generating the DSNL031I message, collect the following diagnostic items:
  - Statistics Class 4 trace record for the LUWID that is associated with the failing request.
- Identify all connected systems that are participating in the processing of the remote request, including:
  - The requester system to which the application is connected
  - The data server that is the target of the remote request
  - Any intermediate server systems

  For each system that is a DB2 system, collect the following diagnostic items:
  - The console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
- For non-DB2 systems, refer to the references specific to those products.
- If any dumps were generated on any DB2 system that is participating in processing the remote request, collect the following diagnostic items:
  - The listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.
  - All dumps generated by this failure.

00D35201 • 00D35203

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.

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 Part 2 of *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:

*   Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

*   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.
*   All dumps taken by the attachment facility or requesting application.

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 (RLO) MDD is either invalid or has not been included within the SQLDTARD descriptor. The descriptor is invalid.

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 Part 2 of *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:

*   Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

*   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.
*   All dumps taken by the attachment facility or requesting application.

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. The SQLCADTA row triplet (RLO) is either invalid or has not been included with the SQLDTARD descriptor.

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.

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:

*   Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

*   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.
*   All dumps taken by the attachment facility or requesting application.

00D35204

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 SQLCAGRP (early) group or the number of elements taken from the SQLCAGRP or SQLCAGRP 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 SQLCAGRP. The descriptor is invalid.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

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 SQLDTAGRP (late) group is incorrect. Either the SQLDTAGRP local identifier (LID) is different than 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. 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 SQLDTAGRP group previously specified. The descriptor is invalid.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

00D35206

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. One or more late environmental descriptors is included within the previously specified SQLDTAGRP late group descriptor. However, SQLDTARD row (RLO) Meta Data Definition (MDD) is either incorrect or has not been included within the SQLDTARD descriptor. The descriptor is invalid. The DDM object is either a QRYDSC or the FDODSC scalar of the SQLDTARD collection. The FDOCA geometry is incorrect. One or more late environmental descriptors have been included within the previously processed SQLDTAGRP group. However, the Meta Data Definition (MDD) of the SQLDTARD row (RLO) has not been included within the descriptor. The descriptor is invalid.

00D35207 • 00D35209

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

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.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

00D35208

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 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.

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 Part 2 of *Utility 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.

00D35209

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 length is specified in the LL preceding the QRYDSC or 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.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

00D3520A

Explanation: DB2 has detected an error in the SQLDTARD reply data object received in response to an EXCSQLSTT 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.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

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.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

00D3520C • 00D3520E

00D3520C

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 object DSSs. One or more of the DDM code points within the containing object DSSs is (are) other than QRYDSC (X'241A'). The descriptor is invalid.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

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.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

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.

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 Part 2 of *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:

- 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.
- Statistics Class 4 trace record for the LUWID associated with the failing request.

If the DRDA server is DB2 for z/OS, then DB2 diagnostic information is available. In this case, at the DB2 server, collect the following diagnostic item:

- 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.

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.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

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.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

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.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

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.

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

00D35305 • 00D35307

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

00D35305

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 exceeds the sum of the lengths of all the constituent instance variables.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.

- All dumps taken by the attachment facility or requesting application.

00D35306

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.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

00D35307

Explanation: DB2 has detected an error in the DDM reply message received from the remote server in response to a DDM command. The value of the DDM enumerated value instance variable, DTALCKST is other than TRUE (X'F1') or FALSE (X'F0').

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

00D35308

Explanation: DB2 has detected an error in the MGRLVLRM reply message received from the remote server in response to the EXCSAT DDM command. The MGRLVL specified is not supported by DB2. DB2 supports the following DDM Level 3 managers: CMNAPPC, SUPERVISOR, SECMGR, AGENT, DIRECTORY, SQLAM, and RDB.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

00D35309

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.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

00D3530A

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.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

00D3530B

Explanation: DB2 has detected an error in the DDM reply message received from the remote server in response to a DDM OPNQRY command. The value of the enumerated instance variable, QRYPRCTYP, is other than SNGROWPRC or LMTBLKPRC.

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 58017.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

00D3530C

Explanation: DB2 has detected an error in the DDM 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.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

00D3530D

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, a collection, contains a scalar instance variable other than CCSIDSBC, CCSIDMBC or CCSIDDBC.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.

• All dumps taken by the attachment facility or requesting application.

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 TYPDEFOVR 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 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 Part 2 of *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:
• Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:
• 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.
• All dumps taken by the attachment facility or requesting application.

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 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 Part 2 of *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:
• Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:
• 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.
• All dumps taken by the attachment facility or requesting application.

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 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 Part 2 of *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:
• Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:
• 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.
• All dumps taken by the attachment facility or requesting application.

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 CMMRQSRM reply message.

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 -30020 and
SQLSTATE 58009.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error
in DB2, refer to Part 2 of *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. For the DB2 system generating the DSNL031I
message, collect the following diagnostic items:
* Statistics Class 4 trace record for the LUWID
  associated with the failing request.

In addition, identify all connected systems participating
in the processing of the remote request. This includes
the requester system to which the application is
connected and the data server which is the target of the
remote request. This may also include intermediate
server systems. For each system that is a DB2 system,
collect the following diagnostic items:
* Console output and the listing of the SYSLOG data
  set from each connected site for the period of time
  spanning the failure.

For non-DB2 systems, refer to the references specific to
those products.

If any dumps were generated on any DB2 system
participating in processing the remote request, collect
the following diagnostic items:
* Listings of the SYS1.LOGREC data set, obtained by
  executing IFCEREP1 at each connected site.
* All dumps created by this failure.

00D35312

Explanation: DB2 has detected an error in the DDM
reply message received from the remote server in
response to a DDM command. Either DB2 was
expecting to receive a SRVPRTY object and received an
object other than SRVPRTY, or DB2 was expecting to
receive an IPADDR object and received an object other
an IPADDR.

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 Part 2 of *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. For the DB2 system generating the DSNL031I
message, collect the following diagnostic items:
* Statistics Class 4 trace record for the LUWID
  associated with the failing request.

In addition, identify all connected systems participating
in the processing of the remote request. This includes
the requester system to which the application is
connected and the data server which is the target of the
remote request. This may also include intermediate
server systems. For each system that is a DB2 system,
collect the following diagnostic items:
* Console output and the listing of the SYSLOG data
  set from each connected site for the period of time
  spanning the failure.

For non-DB2 systems, refer to the references specific to
those products.

If any dumps were generated on any DB2 system
participating in processing the remote request, collect
the following diagnostic items:
* Listings of the SYS1.LOGREC data set, obtained by
  executing IFCEREP1 at each connected site.
* All dumps created by this failure.

00D35313

Explanation: DB2 has detected an error in the DDM
reply message received from the remote server in
response to a DDM command. The value of the
QRYATTUPD instance variable is not recognized for
this command in DDM Level 6.

System action: DB2 generates an alert, and writes
message DSNL031I 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 Part 2 of *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.

If the DRDA requester is also a DB2 for OS/390 system, then at the requester DB2 system, collect the following diagnostic items:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- All dumps taken by the attachment facility or requesting application.

00D35314

Explanation: DB2 detected an error in the DDM reply message received from the remote server in response to a DDM command. The value of the QRYATTSNS instance variable is not recognized for this command in DDM Level 6.

System action: DB2 generates an alert, and writes message DSNL031I 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 Part 2 of *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.

If the DRDA requester is also a DB2 for OS/390 system, then at the requester DB2 system, collect the following diagnostic items:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- All dumps taken by the attachment facility or requesting application.

00D35315

Explanation: DB2 has detected an error in the DDM reply message received from the remote server in response to a DDM command. The received value for the DDM instance variable QRYATTSCR is other than TRUE (X'F1') or FALSE (X'F0'). The value is not supported.

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 Part 2 of *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. For the DB2 system generating the DSNL031I message, collect the following diagnostic items:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

In addition, identify all connected systems participating in the processing of the remote request. This includes the requester system to which the application is connected and the data server which is the target of the remote request. This may also include intermediate server systems. For each system that is a DB2 system, collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.

For non-DB2 systems, refer to the references specific to those products.

If any dumps were generated on any DB2 system participating in processing the remote request, collect the following diagnostic items:

- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.
- All dumps created by this failure.

00D35316

Explanation: DB2 has detected an error in the DDM reply message received from the remote server in response to a DDM command. The received value for the DDM instance variable QRYATTSET is other than TRUE (X'F1') or FALSE (X'F0'). The value is not supported.

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 Part 2 of *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. For the DB2 system generating the DSNL031I message, collect the following diagnostic items:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

In addition, identify all connected systems participating in the processing of the remote request. This includes the requester system to which the application is connected and the data server which is the target of the remote request. This may also include intermediate server systems. For each system that is a DB2 system, collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.

For non-DB2 systems, refer to the references specific to those products.

If any dumps were generated on any DB2 system participating in processing the remote request, collect the following diagnostic items:

- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.
- All dumps created by this failure.

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.

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 Part 2 of *Utility 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 identified 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.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

00D35502

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. Within one or more SQLDAROW occurrences, either (a) the lengths of SQLNAME_m and SQLNAME_s are both non-0, or (b) the lengths of SQLLABEL_m and SQLLABEL_s are both non-0, or (c) the lengths of SQLCOMMENTS_m and SQLCOMMENTS_s are both non-0. The data is invalid with regard to the Early SQLDAGRP group descriptor as defined by DRDA.

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 Part 2 of *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:

* Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

* 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.
* All dumps taken by the attachment facility or requesting application.

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.

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 AR.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *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:

* Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

* 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.

* All dumps taken by the attachment facility or requesting application.

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.

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 Part 2 of *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:

* Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

* 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.
* All dumps taken by the attachment facility or requesting application.

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 SQLCAGRP or SQLDAGRP early descriptors or the SQLDTAGRP (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 SQLCAGRP or SQLDAGRP early groups or the SDA length specification within the SQLDTAGRP 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.

00D35604 • 00D35605

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 Part 2 of *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:
- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:
- 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.
- All dumps taken by the attachment facility or requesting application.

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 SQLCAGRP or SQLDAGRP early descriptors or the SQLDTAGRP (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 SQLCAGRP or SQLDAGRP early groups or the SDA length specification within the SQLDTAGRP 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.

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 Part 2 of *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:
- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:
- 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.
- All dumps taken by the attachment facility or requesting application.

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.

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 Part 2 of *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:
- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:
- 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.
- All dumps taken by the attachment facility or requesting application.

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 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 Object DSS (OBJDSS). The code points of one or more of the DDM reply data objects is other than QRYDTA (X'241B'). This is invalid.

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 Part 2 of *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:

*   Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

*   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.
*   All dumps taken by the attachment facility or requesting application.

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. 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.

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 Part 2 of *Utility 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.

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 SQLDTARD 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.

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 Part 2 of *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:

*   Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

*   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.
*   All dumps taken by the attachment facility or requesting application.

00D35609

Explanation: DB2 detected an error in conversion of numeric data. Possible scenarios are: floating point conversion overflow, or digits of numeric character out of range.

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.

System programmer response: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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 *SQL Reference* for details of floating point range.

Problem determination: Analyze the statistics class 4 trace record identified by the IFCID sequence number given in message DSNL031I.

At this remote server, collect the following diagnostic items:

* 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.
* All dumps taken by the attachment facility or requesting application.

00D35610

Explanation: DB2 has detected an error in command data received from a remote requester, 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 4 bytes length field. The 4 bytes length field is incomplete and split across more than one object. The length field is invalid.

System action: An alert is generated and message DSNL031I (if the error is detected by DB2 acting as a requester) or message DSNL032I (if the error is detected by DB2 acting as a server) 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 Part 2 of *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 or DSNL032I message.

For the DB2 system generating the DSNL031I or DSNL032I message, collect the following diagnostic items:

* Statistics Class 4 trace record for the LUWID associated with the failing request.

In addition, identify all connected systems participating in the processing of the remote request. This includes the requester system to which the application is connected and the data server which is the target of the remote request. This may also include intermediate server systems. For each system that is a DB2 system, collect the following diagnostic items:

* Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.

For non-DB2 systems, refer to the documentation specific to those products for diagnostic procedures.

If any dumps were generated on any DB2 system participating in processing the remote request, collect the following diagnostic items:

* Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.
* All dumps created by this failure.

00D35611

Explanation: DB2 has detected an error in command data received from a remote requester, 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 4 bytes 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.

System action: An alert is generated and message DSNL031I (if the error is detected by DB2 acting as a requester) or message DSNL032I (if the error is detected by DB2 acting as a server) 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 Part 2 of *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 or DSNL032I message.

For the DB2 system generating the DSNL031I or DSNL032I message, collect the following diagnostic items:

* Statistics Class 4 trace record for the LUWID associated with the failing request.

In addition, identify all connected systems participating in the processing of the remote request. This includes the requester system to which the application is connected and the data server which is the target of the remote request. This may also include intermediate server systems. For each system that is a DB2 system, collect the following diagnostic items:

* Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.

For non-DB2 systems, refer to the documentation specific to those products for diagnostic procedures.

If any dumps were generated on any DB2 system participating in processing the remote request, collect the following diagnostic items:

* Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.
* All dumps created by this failure.

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 late descriptor includes late environmental descriptors and the SQLDTAGRP meta data definition (MDD) is either invalid or has not been included within the descriptor. The descriptor is invalid.

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 AR.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *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:

* Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

* 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.
* All dumps taken by the attachment facility or requesting application.

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.

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 AR.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *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:

* Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

* 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.
* All dumps taken by the attachment facility or requesting application.

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.

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 AR.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *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:
- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:
- 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.
- All dumps taken by the attachment facility or requesting application.

00D35704

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 constituent SQLDTAGRP 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.

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 Part 2 of *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:
- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:
- 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.
- All dumps taken by the attachment facility or requesting application.

00D35705

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 reply data object, or the SQLDTA command data object. The FDOCA geometry is incorrect. All the OBJDSS carriers have been processed and the SQLDTAGRP has not been assembled. The SQLDTAGRP is incomplete and the descriptor is invalid.

System action: If the error occurs within the QRYDSC or SQLDTARD reply data object, 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 Part 2 of *Utility 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.

00D35706

Explanation: DB2 has detected an error while processing the SQLDTAGRP late group descriptor, contained within the DRDA SQLDTARD or SQLDTA late descriptors. The DDM object is either an SQLDTARD or SQLDTA and must be contained within a single OBJDSS. The descriptor, as defined by the length of the SQLDTARD or SQLDTA DDM objects, is incomplete and is therefore invalid.

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 SQLDTARD DDM object, 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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

00D35707

Explanation: DB2 has detected an error while processing the SQLDTAGRP late group descriptor, contained within the DRDA SQLDTARD 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.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

00D35708

Explanation: DB2 has detected an error while processing the SQLDTAGRP 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.

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 Part 2 of *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:

• Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

• 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.

• All dumps taken by the attachment facility or requesting application.

00D35709

Explanation: DB2 has detected an error while processing the SQLDTAGRP late group descriptor contained within a QRYDSC DDM object. The FDOCA geometry is incorrect. The SQLDTAGRP length specification exceeds the size of the QRYDSC level 6b DSS carrier. The descriptor is invalid.

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 Part 2 of *Utility 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.

00D3570A

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 one of the following: QRYDSC, SQLDTARD or SQLDTA. The length override value in one of the constituent SQLDTAGRP SDAs is a placeholder length value, but an allowable placeholder length was not received. This is invalid.

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 the error occurs within a QRYDSC or SQLDTARD DDM object, 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 remote DRDA client.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

If you suspect an error in DB2, refer to Part 2 of *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:

• Statistics Class 4 trace record for the LUWID associated with the failing request.

For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items:

• 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.

• All dumps taken by the attachment facility or requesting application.

00D3570B

Explanation: DB2 has detected an error while processing the SQLDTAGRP late group descriptor, contained within the DRDA SQLDTA 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.

System action: An alert is generated and message DSNL032I is written to the console if the error is detected while parsing a command. 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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

00D3570C

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 or SQLDTARD reply data object. The DB2 requester has received an XMLSEE LID but the CCSIDXML in the TYPDEFOVR in effect for the object is not UTF-8. DB2 only supports UTF-8 for XMLSEE LIDs in a reply data object. The CCSIDXML value is not supported and is rejected.

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 Part 2 of *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. For the DB2 system generating the DSNL031I message, collect the following diagnostic items:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

In addition, identify all connected systems participating in the processing of the remote request. This includes the requester system to which the application is connected and the data server which is the target of the remote request. This may also include intermediate server systems. For each system that is a DB2 system, collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.

For non-DB2 systems, refer to the references specific to those products.

If any dumps were generated on any DB2 system participating in processing the remote request, collect the following diagnostic items:

- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.
- All dumps created by this failure.

00D3570D

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 or SQLDTARD reply data object. The DB2 requester has received an XMLSIE LID in an reply data object. DB2 only supports XMLSEE LIDs in a reply data object. The XMLSIE LID is not supported and is rejected.

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 Part 2 of *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. For the DB2 system generating the DSNL031I message, collect the following diagnostic items:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

In addition, identify all connected systems participating in the processing of the remote request. This includes the requester system to which the application is connected and the data server which is the target of the remote request. This may also include intermediate server systems. For each system that is a DB2 system, collect the following diagnostic items:

| • Console output and the listing of the SYSLOG data
| set from each connected site for the period of time
| spanning the failure.

| For non-DB2 systems, refer to the references specific to
| those products.

| If any dumps were generated on any DB2 system
| participating in processing the remote request, collect
| the following diagnostic items:
| • Listings of the SYS1.LOGREC data set, obtained by
| executing IFCEREP1 at each connected site.
| • All dumps created by this failure.

00D35801

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. 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.

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 Part 2 of *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:
• Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:
• 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.
• All dumps taken by the attachment facility or requesting application.

00D35802

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 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.

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 Part 2 of *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:
• Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:
• 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.
• All dumps taken by the attachment facility or requesting application.

00D35803

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 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.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

00D35804

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 either a QRYDSC, SQLDTARD or SQLDTA. The FDOCA geometry is incorrect. 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.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

00D35805

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 an 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.

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 the error occurs within a QRYDSC or SQLDTARD replay data object (SQLDTARD late descriptor), the application will receive SQLCODE -30000 and SQLSTATE 58008. If the error occurs within an SQLDTA command data object (SQLDTA late descriptor), a DSCINVRM reply message will be returned to the local DB2.

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.

00D35806 • 00D35808

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 either an SQLDTARD or SQLDTA, each of which may not span DDM level 6b object (OBJ) DSSs. The containing level 6b OBJDSS contains only late environmental descriptors and neither groups or rows are defined. The descriptor is invalid.

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 Part 2 of *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:
* Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:
* 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.
* All dumps taken by the attachment facility or requesting application.

00D35807

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 containing level 6b DSSs is (are) other than an object (OBJ) DSS. The descriptor is invalid.

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 Part 2 of *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:
* Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:
* 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.
* All dumps taken by the attachment facility or requesting application.

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.

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 Part 2 of *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:
* Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

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.

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 Part 2 of *Utility 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.

00D35901

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data received from a local DB2. A reply DSS (RPYDSS) has been received from the local DB2. This 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 (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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

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 carried in a level 6b request DSS (RQSDSS) must be the first level 6b DSS received.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

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.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

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.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

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.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

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 ACCRDB. The only valid command prior to ACCRDB is another EXCSAT command.

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 Part 2 of *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:

*   Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

*   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.
*   All dumps taken by the attachment facility or requesting application.

00D35907

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data received from an local DB2. the ACCRDB command has been successfully processed and the current command is another ACCRDB instance. This 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 (RDBACCRM) 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 Part 2 of *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:

*   Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

*   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.
*   All dumps taken by the attachment facility or requesting application.

00D35908

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data received from an local DB2. The state of the DB2 remote server is in 'BIND processing' and the current DDM command is other than BNDSQLSTT, ENDBND, RDBCMM or RDBRLLBCK.

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 (PKGBPARM) 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 Part 2 of *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:

*   Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

*   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.
*   All dumps taken by the attachment facility or requesting application.

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.

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.

00D3590A • 00D3590C

System programmer response: If you suspect an error in DB2, refer to Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

00D3590A

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.

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 Part 2 of *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 DB2 local DB2, collect the following diagnostic items:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this DB2 remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

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.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this DB2 remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

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.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this DB2 remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

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.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this DB2 remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

00D3590E

Explanation: DB2 has detected an error while parsing a DDM command data object 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 CCSIDDBC. The length of one of the constituent scalars is incorrect.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this DB2 remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

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 CCSIDDBC. The TYPDEFOVR contains multiple instances of the CCSIDSBC scalar. This 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 (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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this DB2 remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

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 CCSIDDBC. The TYPDEFOVR contains multiple instances of the CCSIDMBC scalar. This 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 (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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this DB2 remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

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 CCSIDDBC. The TYPDEFOVR contains multiple instances of the

CCSIDDBC scalar. This 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 (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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this DB2 remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

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00D35912

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 CCSIDDBC. The TYPDEFOVR length exceeds the sums of the lengths of the constituent scalars. This 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 (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 Part 2 of *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 DSNL032I message.

At this local DB2, collect the following diagnostic items:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this DB2 remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

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 CCSIDDBC. The TYPDEFOVR contains an object other than CCSIDSBC, CCSIDDBC, or CCSIDDBC. This is invalid.

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 Part 2 of *Utility 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 command) exceeds the DDM level specified by the AR during CONNECT processing.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this DB2 remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

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.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this DB2 remote server, collect the following diagnostic items:

- 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.

- All dumps taken by the attachment facility or requesting application.

00D35917

Explanation: DB2 detected an error while parsing a DDM command data object received from a remote requester. The command data object is not supported at the DDM level negotiated during CONNECT processing. The command data object is rejected.

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 remote requester.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *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 DSNL032I message. For the DB2 system generating the DSNL032I message, collect the following diagnostic items:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

In addition, identify all connected systems participating in the processing of the remote request. This includes the requester system to which the application is connected and the data server which is the target of the remote request. This may also include intermediate server systems. For each system that is a DB2 system, collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.

For non-DB2 systems, refer to the documentation specific to those products for diagnostic procedures.

If any dumps were generated on any DB2 system participating in processing the remote request, collect the following diagnostic items:

- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.
- All dumps created by this failure.

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.

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 Part 2 of *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 DSNL032I message.

At this local DB2, collect the following diagnostic items:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

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.

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 (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 Part 2 of *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 DSNL032I message.

At this local DB2, collect the following diagnostic item:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

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.

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 Part 2 of *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:

* Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

* 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.
* All dumps taken by the attachment facility or requesting application.

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.

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 Part 2 of *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:

* Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

* 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.
* All dumps taken by the attachment facility or requesting application.

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.

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 Part 2 of *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:

* Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

* 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.
* All dumps taken by the attachment facility or requesting application.

00D3591D

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. A SECCHK command was received out of order, which means either an ACCSEC command has not executed successfully, or a SECCHK command has already been processed.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

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.

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 Part 2 of *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:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

At this remote server, collect the following diagnostic items:

- 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.
- All dumps taken by the attachment facility or requesting application.

00D3591f

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. The negotiated resync manager level is less than 5, but an SYNCRSY command was received. The request 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 (CMDNSPRM) is returned to the remote requester.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *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 DSNL032I message. For the DB2 system generating the DSNL032I message, collect the following diagnostic items:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

In addition, identify all connected systems participating in the processing of the remote request. This includes the requester system to which the application is connected and the data server which is the target of the remote request. This may also include intermediate server systems. For each system that is a DB2 system, collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.

For non-DB2 systems, refer to the documentation specific to those products for diagnostic procedures.

If any dumps were generated on any DB2 system participating in processing the remote request, collect the following diagnostic items:

- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.
- All dumps created by this failure.

00D35920

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. A SYNCCTL command was received but the negotiated SYNCPTMGR (Sync Point Manager) level is less than 5 and XAMGR (XA Manager) level is less than 7. The request 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 (CMDNSPRM) is returned to the remote requester.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *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 DSNL032I message. For the DB2 system generating the DSNL032I message, collect the following diagnostic items:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

In addition, identify all connected systems participating in the processing of the remote request. This includes the requester system to which the application is connected and the data server which is the target of the remote request. This may also include intermediate server systems. For each system that is a DB2 system, collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.

For non-DB2 systems, refer to the documentation specific to those products for diagnostic procedures.

If any dumps were generated on any DB2 system participating in processing the remote request, collect the following diagnostic items:

- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.
- All dumps created by this failure.

00D35921

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. DB2 received an ACCRDB command from the resynch port. The request is invalid.

System action: The conversation is terminated.

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 remote requester.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *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 DSNL032I message. For the DB2 system generating the DSNL032I message, collect the following diagnostic items:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

In addition, identify all connected systems participating in the processing of the remote request. This includes the requester system to which the application is connected and the data server which is the target of the remote request. This may also include intermediate server systems. For each system that is a DB2 system, collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.

For non-DB2 systems, refer to the documentation specific to those products for diagnostic procedures.

If any dumps were generated on any DB2 system participating in processing the remote request, collect the following diagnostic items:

- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.
- All dumps created by this failure.

00D35922

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. DB2 received an ACCSEC command from the resynch port. This request is invalid.

System action: The conversation is terminated.

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 (PRCCNPRM) is returned to the remote requester.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *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 DSNL032I message. For the DB2 system generating the DSNL032I message, collect the following diagnostic items:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

In addition, identify all connected systems participating in the processing of the remote request. This includes the requester system to which the application is connected and the data server which is the target of the remote request. This may also include intermediate server systems. For each system that is a DB2 system, collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.

For non-DB2 systems, refer to the documentation specific to those products for diagnostic procedures.

If any dumps were generated on any DB2 system participating in processing the remote request, collect the following diagnostic items:

- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.
- All dumps created by this failure.

00D35923

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. A SECCHK command was received from the resynch port. The request is invalid.

System action: The conversation is terminated.

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 (PRCCNPRM) is returned to the remote requester.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *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 DSNL032I message. For the DB2 system generating the DSNL032I message, collect the following diagnostic items:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

In addition, identify all connected systems participating in the processing of the remote request. This includes the requester system to which the application is connected and the data server which is the target of the remote request. This may also include intermediate server systems. For each system that is a DB2 system, collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.

For non-DB2 systems, refer to the documentation specific to those products for diagnostic procedures.

If any dumps were generated on any DB2 system participating in processing the remote request, collect the following diagnostic items:

- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.
- All dumps created by this failure.

00D35924

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. An INTRDBRQS command was received on an SNA connection. The request is invalid.

System action: The conversation is terminated.

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 (MGRDEPRM) is returned to the remote requester.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *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 DSNL032I message. For the DB2 system generating the DSNL032I message, collect the following diagnostic items:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

In addition, identify all connected systems participating in the processing of the remote request. This includes the requester system to which the application is connected and the data server which is the target of the remote request. This may also include intermediate server systems. For each system that is a DB2 system, collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.

For non-DB2 systems, refer to the documentation specific to those products for diagnostic procedures.

If any dumps were generated on any DB2 system participating in processing the remote request, collect the following diagnostic items:

- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.
- All dumps created by this failure.

00D35925

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. A SYNCCTL command was received but the negotiated XAMGR (XA Manager) level is less than 7. The request 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 (CMDNSPRM) is returned to the remote requester.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *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 DSNL032I message. For the DB2 system generating the DSNL032I message, collect the following diagnostic items:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

In addition, identify all connected systems participating in the processing of the remote request. This includes the requester system to which the application is connected and the data server which is the target of the remote request. This may also include intermediate server systems. For each system that is a DB2 system, collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.

For non-DB2 systems, refer to the documentation specific to those products for diagnostic procedures.

If any dumps were generated on any DB2 system participating in processing the remote request, collect the following diagnostic items:

- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.
- All dumps created by this failure.

00D35926

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data received from a remote requester. The DDM object is a TYPDEFOVR, signaling a change in CCSIDs from the remote requester. This is a DDM collection consisting of four DDM scalars: CCSIDSBC, CCSIDMBC, CCSIDDBC and CCSIDXML. The TYPDEFOVR contains multiple instances of the CCSIDXML scalar. This 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 (SYNTAXRM) is returned to the remote requester.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *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 DSNL032I message. For the DB2 system generating the DSNL032I message, collect the following diagnostic items:

- Statistics Class 4 trace record for the LUWID associated with the failing request.

In addition, identify all connected systems participating in the processing of the remote request. This includes the requester system to which the application is connected and the data server which is the target of the remote request. This may also include intermediate server systems. For each system that is a DB2 system, collect the following diagnostic items:

- Console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.

For non-DB2 systems, refer to the documentation specific to those products for diagnostic procedures.

If any dumps were generated on any DB2 system participating in processing the remote request, collect the following diagnostic items:

- Listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.
- All dumps created by this failure.

Chapter 11. X'D4......' codes

Reason code identifiers that begin with `00D4` communicate normal and error situations with the IMS attachment facility.

00D40001

Explanation: The IMS attachment facility detected an invalid save area chain pointer. This condition occurs only if the save area is overlaid or if the save area pointer is invalid.

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 Part 2 of *Utility Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Analyze the dump. Register 13 plus four bytes is the address of the invalid save area chain pointer.

Collect the following diagnostic items:
- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- IMS dependent region, control region dump, or both.
- IMS system log information, for the period of time spanning the failure.
- IMS console log.

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 reason code is followed by the current IMS attachment facility trace 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).

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: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Analyze the SYS1.LOGREC data. The log record contains the current IMS attachment facility trace entry, the first four characters of the command, the output destination, and the authorization ID for the failing command.

Collect the following diagnostic items:
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- IMS dependent region, control region dump, or both.
- IMS system log information, for the period of time spanning the failure.
- IMS console log.

00D40061

Explanation: The IMS attachment facility could not establish a connection with DB2 because an IMS /STOP SUBSYS command was issued.

System action: The application's SQLCA is updated with an SQLCODE -924 and reason code 00D40061. Control is returned to the application.

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.

User response: Wait for the IMS /START SUBSYS command to be issued before reentering the transaction.

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.

System action: The application's SQLCA is updated with an SQLCODE -924 and reason code 00D40062. Control is returned to the application.

Operator response: Restart IMS.

System programmer response: Determine why IMS was stopped.

User response: Reenter the transaction after IMS has been restarted.

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.

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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

* SYSABEND, SYSUDUMP, or SYSMDUMP output.
* Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
* IMS dependent region, control region dump, or both.
* IMS system log information, for the period of time spanning the failure.
* IMS console log.

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.

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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

* SYSABEND, SYSUDUMP, or SYSMDUMP output.
* Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
* IMS dependent region, control region dump, or both.
* IMS system log information, for the period of time spanning the failure.
* IMS console log.

00D44011

Explanation: The DB2-DL/I batch support or IMS BMP job step cannot continue because the application program could not be loaded.

System action: The DB2-DL/I batch support or IMS BMP job step cannot continue and processing is terminated.

Operator response: Notify the system programmer.

System programmer response: Be sure the DDITV02 SYSIN data (for DB2-DL/I batch support) or IMSBATCH procedure (for an IMS BMP job step) names a subsystem member (SSM) parameter that points to a resource translation table (RTT). The RTT maps the IMS application name to the DB2 plan name.

Refer to *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 the SYSLOG data set for the period of time spanning the failure.
* SYSABEND, SYSUDUMP, or SYSMDUMP output.
* 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.
* Copy of the DDITV02 SYSIN data set.

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.

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 Part 2 of *Diagnosis Guide and Reference* for more information about failure analysis procedures.

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:

- 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.
- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- 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.
- Copy of the DDITV02 SYSIN data set.

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.

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 Part 2 of *Diagnosis Guide and Reference* for information on 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:

- 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.
- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- 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.
- Copy of the DDITV02 SYSIN data set.

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.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Check the DDITV02 DD SYSIN values for proper format.

Collect the following diagnostic items:

- 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.
- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- 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.
- Copy of the DDITV02 SYSIN data set.

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.

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

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DSNMIN10 as the initialization module and rerun the job.

Refer to *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:

* 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.
* SYSABEND, SYSUDUMP, or SYSMDUMP output.
* 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.
* Copy of the DDITV02 SYSIN data set.

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.

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.

Refer to *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:

* 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.
* SYSABEND, SYSUDUMP, or SYSMDUMP output.
* 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.
* Copy of the DDITV02 SYSIN data set.

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.

System action: The DB2-DL/I batch support cannot continue and processing is terminated.

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.

User response: Notify the system programmer.

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.

Refer to *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:

* 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.
* SYSABEND, SYSUDUMP, or SYSMDUMP output.
* 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.
* Copy of the DDITV02 SYSIN data set.
* Copy of the DDOTV02 output data set.

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00D44032

Explanation: The DB2-DL/I batch support cannot continue because the DB2 create thread or signon failed.

System action: The DB2-DL/I batch support cannot continue and processing terminates abnormally.

Operator response: Notify the system programmer.

User response: Verify that all required DB2 objects are available and that the specified plan name is correct. If the problem persists, notify the system programmer.

Problem determination: Examine the WAL control block in the dump, or any X'5501FF00' IMS attachment log records in the IMS log data set (if available) for specific DB2 return and reason codes, along with the WALERN field which indicates the reason for the failure.

The WAL control block in the dump contains information about the connection and the IMS attach trace table. The last entry in the trace table will have an ID of CTHD or SIGN and the CALL STATUS contains the two-byte return code and four-byte reason code of the failure.

Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

* 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.
* SYSABEND, SYSUDUMP, or SYSMDUMP output.
* 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.
* Copy of the DDITV02 SYSIN data set.
* Copy of the DDOTV02 output data set.

00D44033

Explanation: The DB2-DL/I batch support cannot continue because the application is deadlocked or experienced a timeout.

System action: Processing terminates and DB2 sends a message to the MVS console.

Operator response: It might be necessary to schedule the application program when lock contentions or deadlock conditions are less likely to occur.

System programmer response: To determine the reason for the deadlock or timeout condition, review the information for the message that was issued. DB2 issues message DSNT375I in the case of a plan lock deadlock or DSNT376I in the case of a plan lock timeout.

Refer to *Diagnosis Guide and Reference* for information

on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: Collect the following diagnostic items:

* 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.
* SYSABEND, SYSUDUMP, or SYSMDUMP output.
* 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.
* Copy of the DDITV02 SYSIN data set.
* Copy of the DDOTV02 output data set.

Related information

↪ DSNT375I (DB2 Messages)

↪ DSNT376I (DB2 Messages)

00D44034

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.

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 snap 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.

Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- IMS trace output.
- IMS system log information, for the period of time spanning the failure.
- 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.
- IMS console log.
- All dumps taken by the attachment facility or requesting application.
- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period from the last IPL to the time of the failure.

00D44035

Explanation: The DB2-DL/I batch support cannot continue because the PSB name used as the DB2 authorization ID begins with the character string SYSADM which is not allowed.

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 a site problem. A PSB name beginning with SYSADM is being used as the authorization ID.

Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The PSB= parameter of the job step execute statement indicates the PSB name used. Register 3 plus X'34' is the authorization ID specified.

Collect the following diagnostic items:
- 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.
- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- 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.
- Copy of the DDITV02 SYSIN data set.
- Copy of the DDOTV02 output data set.

00D44036

Explanation: The DB2-DL/I batch support cannot continue because the authorization ID has been changed by the application program.

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 a site problem. The application program has modified the authorization ID.

Refer to *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:
- 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.
- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- 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.
- Copy of the DDITV02 SYSIN data set.
- Copy of the DDOTV02 output data set.

00D44037

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.

System action: The DB2-DL/I batch support cannot continue and processing is terminated.

Operator response: Notify the system programmer

System programmer response: This might be a multiple recursion problem caused by the execution of a changed data capture exit.

Problem determination: Verify that the user exit(s) are not being recursively invoked during a data base update operation.

00D44038

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.

System action: DB2 propagation processing is abnormally terminated.

System programmer response: This is a site problem. The required release of IMS is not available.

User response: Notify the system programmer.

Problem determination: Verify that the IMS release that supports data propagation from DB2 to IMS is installed.

00D44039

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.

System action: The DB2-DL/I batch support cannot continue and processing is terminated.

System programmer response: 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.

Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Check the DDOTV02 DD for the proper DCB-RECFM value of 'V' or 'VB'.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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00D44050

Explanation: The DB2-DL/I batch support cannot continue because a DB2 prepare problem was detected.

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 an internal error. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: 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.

Collect the following diagnostic items:

- 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.
- SYSABEND, SYSUDUMP, or SYSMDUMP output.

- 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.
- Copy of the DDITV02 SYSIN data set.
- Copy of the DDOTV02 output data set.

00D44051

Explanation: The DB2-DL/I batch support cannot continue because a DB2 commit continue problem was detected.

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 an internal error. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: 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.

Collect the following diagnostic items:

- 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.
- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- 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.
- Copy of the DDITV02 SYSIN data set.
- Copy of the DDOTV02 output data set.

00D44052

Explanation: The DB2-DL/I batch support cannot continue because a DB2 abort problem was detected.

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 an internal error. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: 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.

Collect the following diagnostic items:

- 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.
- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- 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.
- Copy of the DDITV02 SYSIN data set.
- Copy of the DDOTV02 output data set.

00D44053

Explanation: The DB2-DL/I batch support cannot continue because a DL/1 XRST call problem was detected.

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 nonblank value, validate the PCB used for the call, and validate the parameters passed by the call. Correct the application program and resubmit the job.

Refer to *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:

- 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.
- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- 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.
- Copy of the DDITV02 SYSIN data set.
- Copy of the DDOTV02 output data set.

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.

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.

Refer to *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:

- 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.
- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- 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.
- Copy of the DDITV02 SYSIN data set.
- Copy of the DDOTV02 output data set.

00D44055

Explanation: The DB2-DL/I batch support cannot continue because an IMS CHKP call problem was detected by IMS.

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 nonblank value, validate the PCB used for the call, and validate the parameters passed by the call. Correct the application program and resubmit the job.

Refer to *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:

- 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.
- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- 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.

- Copy of the DDITV02 SYSIN data set.
- Copy of the DDOTV02 output data set.

00D44056

Explanation: IMS has detected a problem with the call to IMS ROLL or ROLB causing the DB2 DL/I batch support to stop processing. In most cases, the ROLB call has BKNO=NO (which is the default setting) and you have used a temporary dataset. .

System action: The DB2 DL/I batch support processing is terminated.

Operator response: Notify the system programmer.

System programmer response: One of two errors can result in this reason code: an incorrect ROLB call or an application program error.

In most cases, the ROLB has incorrect settings and data. Complete the following actions to correct the ROLB call settings:

1. Validate that you are using an existing dataset that is not temporary.
2. Validate that the BKN setting is set to YES.
3. Resubmit the job.

Sometimes an application program error can cause this reason code. Complete the following actions to correct the application error:

1. Check the PCB status code for a non-blank value.
2. Validate that the PCB used for the call is correct.
3. Validate the that parameters passed by the call is correct.
4. Resubmit the job.

Refer to *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:

- 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.
- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- 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.
- Copy of the DDITV02 SYSIN data set.
- Copy of the DDOTV02 output data set.

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.

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.

Refer to *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:

- 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.
- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- 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.
- Copy of the DDITV02 SYSIN data set.
- Copy of the DDOTV02 output data set.

Chapter 12. X'D5......' codes

Reason code identifiers that begin with 00D5 communicate normal and error situations with the XML manager.

00D50001

Explanation: You have exceeded the amount of space allowed for processing XML values. The amount of space allowed per user is indicated by panel DSNTIPD.

System action: The operation is not allowed. DB2 issues the message, "resource not available," to the invoker.

System programmer response: If possible, increase the value of subsystem parameter XMLVALA.

Problem determination: The requested operation is not performed. SQLCODE -904 is issued. Messages DSNT500I or DSNT501I might also be issued. For more information, refer to the SQL return code in *Codes*, or to the description of messages DSNT500I and DSNT501I in *Messages*.

Collect the following diagnostic items:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00D50002

Explanation: You have exceeded the amount of space allowed for processing XML values. The amount of space allowed per system is indicated by panel DSNTIPD.

System action: The operation is not allowed. DB2 issues the message, "resource not available," to the invoker.

System programmer response: If possible, increase the value of subsystem parameter XMLVALS.

Problem determination: The requested operation is not performed. SQLCODE -904 is issued. Messages DSNT500I or DSNT501I might also be issued. For more information, refer to the SQL return code in *Codes*, or to the description of messages DSNT500I and DSNT501I in *Messages*.

Collect the following diagnostic items:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00D50003

Explanation: An XML subcomponent internal inconsistency was detected.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The abend code can be issued by any of the XML subcomponent modules. The module name can be found in the SQLCA. SQLERRD1 in the SQLCA contains a unique code that identifies the location within the module where the error was detected. SQLERRM might contain some meaningful information for this particular error. Refer to Part 3 of *Diagnosis Guide and Reference* for information about how to find the SQLCA.

Collect the following diagnostic items:

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of the results produced by the SQL statements.

00D50004

Explanation: The SQL statement or utility could not be executed because z/OS XML System Service is not installed.

System action: The SQL statement is rejected with SQLCODE-904 and this reason code. For a utility, the utility is rejected with message DSNT500I and this reason code.

System programmer response: Install z/OS XML System Service. z/OS R1.7 or later is required. If you are installing on z/OS R1.7, install z/OS XML system service PTF.

Chapter 13. X'D6......' codes

Reason code identifiers that begin with 00D6 communicate normal and error situations with DB2.

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 a table space set to the same point in time.

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.

Refer to *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:
- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00D60C03

Explanation: Unable to access a LOB data page because it is not formatted or it belongs to another LOB.

System action: The operation is not allowed.

System programmer response: Run CHECK LOB to determine the extent of the inconsistency.

Refer to *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:
- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.

- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00D60001

Explanation: DB2 detected an inconsistent condition. The index entry for a LOB does not point to a valid LOB in the auxiliary table. 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 or from a point-in-time recovery.

System action: A record is written to SYS1.LOGREC and an SVC dump is requested.

System programmer response: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Message DSNI013I is issued to identify the index page. Run the CHECK utility to identify the extent of index inconsistency.

Collect the following diagnostic items:
- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00D60100

Explanation: DB2 detected an inconsistent condition. The index entry for a LOB does not point to a valid LOB in the auxiliary table. 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 or from a point-in-time recovery.

System action: A record is written to SYS1.LOGREC and an SVC dump is requested.

System programmer response: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Message DSNI013I is issued to identify the index page. Run the CHECK utility to identify the extent of index inconsistency.

Collect the following diagnostic items:

00D60803

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00D60803

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 to remove the invalid LOBs.

Refer to *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 SQL return code in *Codes*, or to the description of messages DSNT500I and DSNT501I in *Messages*.

Collect the following diagnostic items:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

Chapter 14. X'D7......' codes

Reason code identifiers that begin with 00D7 communicate normal and error situations with the data space manager.

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.

System action: A 'resource not available' code is returned to the caller.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: If you are unable to resolve the problem yourself, notify the system programmer or database administrator.

Problem determination: Obtain output listing from SELECT * FROM SYSIBM.SYSSTOGROUP 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:
- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of the results produced by the SQL statements.
- Listing of DB2 catalog tables.
- 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.
- Definitions of views and tables involved in the error.

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.

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.

User response: If you are unable to resolve the problem, notify the system programmer or database administrator.

Problem determination: Obtain the following information to determine the cause of the problem:
- Listings of the integrated catalog facility (ICF) catalog and VTOC showing the data set
- Details of the request that led to this code
- The contents of the SQLCA
- The operator's console sheet showing any related messages

Collect the following diagnostic items:
- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).

- IDCAMS LISTCAT output for the ICF (VSAM) catalog that contains the DB2 subsystem catalog that defined the failing index or table.
- VTOC listing of the disk volume on which the failing operation occurred.
- Listing of the results produced by the SQL statements.
- Listing of DB2 catalog tables.
- 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.
- Definitions of views and tables involved in the error.

Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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 (RENAME NEW DATASET SHOULD NOT EXIST FOR data-set-name).If you suspect an error in DB2, refer to Part 2 of *Utility Guide and Reference* for information on identifying and reporting the problem. Refer to Part 2 of *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.

System action: Error indication is returned to the end user.

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. .

User response: If you are unable to resolve the problem yourself, notify the system programmer or database administrator.

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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- IDCAMS LISTCAT output for the ICF (VSAM) catalog that contains the DB2 subsystem catalog that defined the failing index or table.
- VTOC listing of the disk volume on which the failing operation occurred.
- Listing of the results produced by the SQL statements.
- Listing of DB2 catalog tables.
- 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.
- Definitions of views and tables involved in the error.

00D70004

Explanation: Certain data sets 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.

System action: Error indication is returned to the user.

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.

User response: You must commit the drop prior to redefining. Notify the system programmer or database administrator, if necessary.

Problem determination: Documentation is needed showing activities from the last committed action up to and 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 Part 2 of *Utility Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of the results produced by the SQL statements.
- 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.
- Definitions of views and tables involved in the error.

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 Part 2 of *Installation Guide* for the correct data set definition attributes.

Problem determination: Obtain an access method services LISTCAT for the named data set's attributes.

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.

System action: The data sets remain intact.

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.

User response: If you are unable to resolve the problem yourself, notify the system programmer or database administrator.

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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- IDCAMS LISTCAT output for the ICF (VSAM) catalog that contains the DB2 subsystem catalog that defined the failing index or table.
- VTOC listing of the disk volume on which the failing operation occurred.
- Listing of the results produced by the SQL statements.
- Listing of DB2 catalog tables.
- 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.
- Definitions of views and tables involved in the error.

00D70007

Explanation: The specified data set must be cataloged in an ICF catalog. It was found in a non-ICF catalog.

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 Part 2 of *Installation Guide* for the correct catalog usage.

00D70008

Explanation: During allocation of a data set, DB2 detected that the attributes for the data set were incorrect. The data set requires the extended format and extended addressability attributes that are defined through DFSMS. Either the data set was defined without the required attributes, or it was not defined through DFSMS.

System action: No data set is allocated. SQLCODE -904 is issued. Additional messages or codes might be issued.

System programmer or storage administrator response: Data sets that are larger than 4GB must belong to a DFSMS data class that is defined with the extended format and extended addressability attributes.

1. If the diagnostic message that issued this code includes a reference to STOGROUP 00000001, then the data set is a catalog or directory data set. Use the LISTCAT command to determine the name of the data set.

2. Update the data set class definition in DFSMS. On the DATA SET CLASS DEFINE panel, specify the following values:

Field	Value
DATA SET NAME TYPE	EXT
EXTENDED ADDRESSABILITY	Y

3. Make sure that the automatic class selection routine associates this data set with this data class.

User response: Notify the system programmer or storage administrator.

Problem determination: Obtain the data set attribute information from the corresponding SMS data class for the named data set.

Related information

"-904" on page 137

➡ LISTCAT command (DFSMS Access Method Services for Catalogs)

00D70009

Explanation: The specified data set was access method services user-defined. It does not have the required DB2 attributes. The data set was defined with a Control Interval (CI) size that is incompatible with the page

size. A compatible CI size is either 4K or the page size. For example, if the page size is 32K, the ControlIntervalSize parameter in the Define command should be specified with either 4K or 32K. DB2 recommends the use of the page size as the Control Interval size.

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.

System programmer response: Ensure that the data set is defined with the compatible CI size, which is 4K or its page size.

User response: Delete the data set that was named and redefine it with the correct CI attributes. Refer to Part 2 of *Installation Guide* for the correct data set definition attributes.

Problem determination: Obtain an access method services LISTCAT for the named data set's attributes.

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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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. This does not mean there is no more space available in the page set for the requested insert. An additional search will be performed for space in the current table space or index space. If space cannot be found, then the data manager component will issue reason code 00c9009c for a partitioned page set or 00c9009d for a non-partitioned page set.

The size of a partition depends on the number of partitions and can be 1 GB, 2 GB, 4 GB, or DSSIZE. If the table space or index space is not partitioned, the maximum size is 64 GB (32 data sets of 2 GB each). The maximum size for an NPI for a large partitioned table space is 512 GB (128 data sets of 4 GB 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 Part 2 of *Administration Guide* for
| data set naming conventions.

| **System action:** No extension is done.

| **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.)

| **User response:** If you are unable to resolve the
| problem yourself, notify the system programmer or
| database administrator.

| **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 *Diagnosis Guide
| and Reference* for information on identifying and
| reporting the problem.

| Collect the following diagnostic items:
| - 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.
| - Dynamic dump, taken to SYS1.DUMPxx data set, by
| DB2 (04E and 04F abends).
| - IDCAMS LISTCAT output for the ICF (VSAM)
| catalog that contains the DB2 subsystem catalog that
| defined the failing index or table.
| - VTOC listing of the disk volume on which the failing
| operation occurred.
| - Listing of the results produced by the SQL
| statements.
| - Listing of DB2 catalog tables.
| - 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.
| - Definitions of views and tables involved in the error.

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.

System action: A 'resource not available' code is
returned to the end user.

System programmer response: Notify the database
administrator if appropriate. Otherwise, check the
passwords and/or RACF authorizations.

User response: Ensure that the correct password is
being used. If you are unable to resolve the problem
yourself, notify the database administrator.

Problem determination: Obtain output from SQL
SELECT * FROM SYSIBM.SYSTABLESPACE and (if
storage group related) SELECT * FROM
SYSIBM.SYSSTOGROUP. 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 related
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 part 2 of *Diagnosis Guide and Reference* for
information on identifying and reporting the problem.

Collect the following diagnostic items:
- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by
  DB2 (04E and 04F abends).
- IDCAMS LISTCAT output for the ICF (VSAM)
  catalog that contains the DB2 subsystem catalog that
  defined the failing index or table.
- Listing of the results produced by the SQL
  statements.
- Listing of DB2 catalog tables.
- 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.
- Definitions of views and tables involved in the error.

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.

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.

User response: If you are unable to resolve the problem, notify the system programmer or database administrator.

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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- IDCAMS LISTCAT output for the ICF (VSAM) catalog that contains the DB2 subsystem catalog that defined the failing index or table.
- Listing of the results produced by the SQL statements.
- 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.
- Definitions of views and tables involved in the error.

00D70014

Explanation: An attempt to extend a data set failed, because a problem was detected in media manager services.

System action: Abort the request.

Operator response: Notify the system programmer or database administrator.

System programmer response: Notify the database administrator if appropriate. Otherwise, check the packs available to the data set. They may merely be full or the data set may have reached its maximum allowable extents. For additional information, see the description of message DSNP001I.

User response: Notify the operator, system programmer, or database administrator.

Problem determination: Obtain console sheet showing associated DSNP001I, DSNO007I, 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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- IDCAMS LISTCAT output for the ICF (VSAM) catalog that contains the DB2 subsystem catalog that defined the failing index or table.
- VTOC listing of the disk volume on which the failing operation occurred.
- Listing of the results produced by the SQL statements.
- 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.
- Definitions of views and tables involved in the error.

00D70015

Explanation: An attempt to update the high-used RBA for a data set failed in media manager services.

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, DSNO007I, 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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- SYSABEND, SYSUDUMP, or SYSMDUMP output.

- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- IDCAMS LISTCAT output for the ICF (VSAM) catalog that contains the DB2 subsystem catalog that defined the failing index or table.
- VTOC listing of the disk volume on which the failing operation occurred.
- Listing of the results produced by the SQL statements.
- 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.
- Definitions of views and tables involved in the error.

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 the console sheet showing the associated DSNP021I message and any related messages preceding that message.

Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

- IDCAMS LISTCAT output for the ICF (VSAM) catalog that contains the DB2 subsystem catalog that defined the failing index or table.
- Listing of the results produced by the SQL statements.
- 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.
- Definitions of views and tables involved in the error.

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.

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. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- IDCAMS LISTCAT output for the ICF (VSAM) catalog that contains the DB2 subsystem catalog that defined the failing index or table.
- Listing of the results produced by the SQL statements.
- Listing of DB2 catalog tables.
- 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.

- Definitions of views and tables involved in the error.

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.

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 Part 2 of *Utility 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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- IDCAMS LISTCAT output for the ICF (VSAM) catalog that contains the DB2 subsystem catalog that defined the failing index or table.
- Listing of the results produced by the SQL statements.
- 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.
- Definitions of views and tables involved in the error.

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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00D70021

Explanation: The data space manager (DSM) subcomponent of DB2 could not write a required log record.

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 *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 the SYSLOG data set for the period of time spanning the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of the results produced by the SQL statements.
- 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.
- DB2 log output, including any DB2 recovery log archive tapes.
- Definitions of views and tables involved in the error.

00D70022

Explanation: The data space manager subcomponent of DB2 is unable to acquire a needed lock. The extend request can not be completed.

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 Part 2 of *Utility Guide and Reference* for information on identifying and reporting the problem.

Problem determination: See message DSNP014I.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of the results produced by the SQL statements.
- 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.
- Definitions of views and tables involved in the error.

00D70023

Explanation: There is an insufficient amount of space in primary allocation to format control pages.

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 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 Part 2 of *Utility 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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).

- IDCAMS LISTCAT output for the ICF (VSAM) catalog that contains the DB2 subsystem catalog that defined the failing index or table.
- VTOC listing of the disk volume on which the failing operation occurred.
- Listing of DB2 catalog tables.
- 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.
- Definitions of views and tables involved in the error.

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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- IDCAMS LISTCAT output for the ICF (VSAM) catalog that contains the DB2 subsystem catalog that defined the failing index or table.
- VTOC listing of the disk volume on which the failing operation occurred.
- Listing of the results produced by the SQL statements.

- 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.
- Definitions of views and tables involved in the error.

Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00D70025

Explanation: An access method services request failed.

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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- IDCAMS LISTCAT output for the ICF (VSAM) catalog that contains the DB2 subsystem catalog that defined the failing index or table.
- VTOC listing of the disk volume on which the failing operation occurred.
- Listing of the results produced by the SQL statements.
- 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.
- Definitions of views and tables involved in the error.

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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00D70027

Explanation: The secondary allocation value is 0. No physical extension is done. If this occurs in a create of a segmented 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.

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.SYSSTOGROUP. Also obtain details of the request that resulted in this code, contents of the SQLCA, and the operator's console sheet showing related messages, if any.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- IDCAMS LISTCAT output for the ICF (VSAM) catalog that contains the DB2 subsystem catalog that defined the failing index or table.
- VTOC listing of the disk volume on which the failing operation occurred.
- Listing of the results produced by the SQL statements.
- Listing of DB2 catalog tables.
- 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.
- Definitions of views and tables involved in the error.

00D70028

Explanation: An HSM request for the recall of a migrated data set failed.

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 Part 2 of *Utility 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 item listed in

- 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.

00D70029

Explanation: DB2 could not access a data set because the data set is on a volume that is offline.

System action: The request to access the data set is terminated.

System programmer response: Ensure that the proper volumes are online. See console message DSNP012I or DSNT500I.

Problem determination: Obtain the following logs to find the failing data set name:

- The operator's console log that contains either the related DSNP012I message with CTLGRC=*00000008* CTLGRSN=*xxxx0532*, or, message DSNT500I with REASON 00D70029.
- The job log that contains the 00D70029 code.

Use ISPF, ISMF, or other facility to locate the volumes and device numbers where the data set resides. Vary the volume, or volumes, back online.

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 Part 2 of *Utility 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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of the results produced by the SQL statements.
- 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.
- Definitions of views and tables involved in the error.

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00D70040

Explanation: An attempt to rename an existing data set failed, because a name does not conform to the naming convention.

System action: Error indication is returned to the end user.

System programmer response: Notify the database administrator if appropriate.

User response: Notify the system programmer.

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:

- 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.
- IDCAMS LISTCAT output for the ICF (VSAM) catalog that contains the DB2 subsystem catalog that defined the failing index or table.
- VTOC listing of the disk volume on which the failing operation occurred.
- Listing of the results produced by the SQL statements.
- Listing of DB2 catalog tables.

- 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.
- Definitions of views and tables involved in the error.

00D70041

Explanation: An attempt to rename an existing data set failed.

System action: Error indication is returned to the end user.

System programmer response: Notify the database administrator if appropriate.

User response: Notify the system programmer.

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:

- 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.
- IDCAMS LISTCAT output for the ICF (VSAM) catalog that contains the DB2 subsystem catalog that defined the failing index or table.
- VTOC listing of the disk volume on which the failing operation occurred.
- Listing of the results produced by the SQL statements.
- Listing of DB2 catalog tables.
- 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.
- Definitions of views and tables involved in the error.

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.

System action: Error indication is returned to the end user.

System programmer response: Notify the database administrator if appropriate.

User response: Notify the system programmer or database administrator.

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:

- 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.
- IDCAMS LISTCAT output for the ICF (VSAM) catalog that contains the DB2 subsystem catalog that defined the failing index or table.
- Listing of the results produced by the SQL statements.
- Listing of DB2 catalog tables.
- 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.
- Definitions of views and tables involved in the error.

00D70043

Explanation: During the define cluster for a 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.

00D70044

Explanation: An unexpected error was received in acquiring the SY_PITR lock by data space manager during DEFINE or EXTEND processing of the data set.

System action: The data set DEFINE or EXTEND did not complete.

Operator response: Notify the system programmer or database administrator.

System programmer response: For additional information, see the description of message DSNP014I.

Problem determination: Obtain the console sheet showing the associated DSNP014I message. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00D70045

Explanation: An unexpected error was received in acquiring the SY_PITR lock by data space manager during DEFINE or EXTEND processing of the data set.

System action: The data set DEFINE or EXTEND did not complete.

Operator response: Notify the system programmer or database administrator.

System programmer response: For additional information, see the description of message DSNP015I.

Problem determination: Obtain the console sheet showing the associated DSNP015I message. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00D70046

Explanation: This is an internal error. An attempt to extend a data set failed because an error is detected. The high used page number of the pageset recorded in DB2 does not match the high used control interval from the integrated catalog facility (ICF) catalog.

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 DSNP007I.

Problem determination: Obtain the console sheet showing the associated DSNP007I message. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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.

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/SQLCA 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 Part 2 of *Utility 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 CTRURESN field of the CT and/or in 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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of the results produced by the SQL statements.
- 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.
- Definitions of views and tables involved in the error.

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: Refer to *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 Part 2 of *Diagnosis Guide and Reference*.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of the results produced by the SQL statements.
- 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.
- Definitions of views and tables involved in the error.

Chapter 15. X'D9......' codes

Reason code identifiers that begin with 00D9 communicate normal and error situations with the recovery manager.

00D900F5

Explanation: DB2 received an error while attempting to read the BSDS of another member in the data sharing group.

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: Register 4 contains the member ID of the member whose BSDS was being read.

Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:
- Contents of the BSDS (both copies if dual BSDS in use) obtained by using the DB2 print log map (DSNJU004) utility.
- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00D900E1

Explanation: The operator replied 'NO' to message DSNR020I. See message DSNR020I for more information.

System action: DB2 terminates.

Problem determination:

00D9EEEE

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.

System action: The following data is stored preceded by code VRAHEX.

Length   Data

4   URE address

4   DSNWRCRD return code

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 Part 2 of *Utility Guide and Reference* for information on identifying and reporting the problem.

00D900F7

Explanation: DB2 received an error while attempting to acquire a lock.

System action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump might be requested. Depending on the error, DB2 might initiate subsystem termination.

Problem determination: Register 4 points to the resource that DB2 was attempting to lock.

Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:
- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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: Refer to *Diagnosis Guide and*

Reference for information on identifying and reporting the problem.

Collect the following diagnostic items:

*   Contents of the BSDS (both copies if dual BSDS in use) obtained by using the DB2 print log map (DSNJU004) utility.
*   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.
*   Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
*   Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00D9BBBB

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.

System action: The following data is stored preceded by code VRAHEX.

Length	Data
4	Content of ACEURE
4	URE address
4	DSNWRCRD return code
1	Retry flags

System programmer response: Use this information with the instructions for the specific failure. If you suspect an error in DB2, refer to Part 2 of *Utility Guide and Reference* for information on identifying and reporting the problem.

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 DB2 subsystem terminates. An SVC dump might be requested.

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.

00D9CCCC

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.

System action: Five bytes of data preceded by code VRAHEX are stored following the EBCDIC string 'RMC-COMMIT/ABORT'.

Length	Data
1 byte	Retry id
1 byte	Notification RMID
1 byte	ACE progress state (ACEPROG)
1 bit	In flight
1 bit	In-Commit1
1 bit	Indoubt
1 bit	In-Commit2
1 bit	End-Commit
1 bit	In-Abort
1 bit	End-Abort
1 bit	(Reserved)

System programmer response: Use this information with the instructions for the specific failure. If you suspect an error in DB2, refer to Part 2 of *Utility Guide and Reference* for information on identifying and reporting the problem.

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: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

*   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.
*   Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).

- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00D9AAAA

Explanation: This reason code identifies additional data stored in the SDWA variable recording area following a failure during abort-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 that is 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.

System action: Five bytes of data preceded by code VRAHEX are stored following the EBCDIC string 'RMC-COMMIT/ABORT'.

Length Data

1 byte Retry flags

1 byte Retry id

1 byte Notification RMID

2 bytes ACE progress state (ACEPROG)

System programmer response: Use this information in conjunction with other information for the primary failure. If you suspect an error in DB2, refer to Part 2 of *Utility Guide and Reference* for information on identifying and reporting the problem.

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: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- Contents of the BSDS (both copies if dual BSDS in use) obtained by using the DB2 print log map (DSNJU004) utility.
- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).

- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00D900EC

Explanation: During the process of re-enabling data sharing, a member other than the surviving member was not able to complete it's 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: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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

00D900EB • 00D90000

requested before DB2 subsystem termination is initiated.

Problem determination: If you suspect an error in DB2, refer to Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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 (DSNJU003) utility to cancel the active conditional restart control record in this member's BSDS.

Problem determination: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Contents of the BSDS (both copies if dual BSDS in use) obtained by using the DB2 print log map (DSNJU004) utility.

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: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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: Refer to *Diagnosis Guide and*

Reference for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

System programmer response: 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 STARTRBA has no specified value. You can create or modify the Conditional Restart parameters with the Change Log Inventory Utility (DSNJU003). See *Utility Guide and Reference* for more information on these utilities.

00D90014

Explanation: The System Level Recovery restart was invalid. All members of the data sharing group must truncate their logs with the same LRSN value that was specified in the SYSPITR conditional restart parameter.

System action: DB2 startup terminates.

Operator response: Collect the SYS1.LOGREC and SVC dump, and contact the system programmer.

System programmer response: Ensure that the conditional restart control record is correct, and then restart DB2. You can run the Print Log Map utility (DSNJU004) to examine the current conditional restart record.

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: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00D90050

Explanation: Data sharing re-enable is canceled.

This DB2 member was canceled 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: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00D92001

Explanation: The checkpoint/restart serial controller (DSNRCRSC) 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 codes (IRLM messages and codes).

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 the SYS1.LOGREC and the SVC dump for the original error, and follow the instructions associated with it.

Problem determination: See the original error.

00D92003

Explanation: The restart request servicer (DSNRRRQS) FRR invoked DB2 subsystem termination, because an unrecoverable error was detected while processing a restart request.

This is a DB2 subsystem termination reason code. For further information, see IRLM abend codes (IRLM messages and codes).

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.

00D92004

Explanation: The shutdown checkpoint 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 codes (IRLM messages and codes).

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.

System action: The checkpoint process will ABEND to prevent a damaged URE 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 (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 SVCDUMP, and notify the system programmer. Restart DB2.

System programmer response: Collect the following diagnostic items:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

Refer to *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.

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:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

Refer to *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:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

Refer to *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.

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

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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 *Utility Guide and Reference*.

Refer to *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.

System action: The restart processing will abend, 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

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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 RURE 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 *Utility Guide and Reference*.

Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00D92023

Explanation: 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

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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 *Utility Guide and Reference*.

Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00D92024

Explanation: 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.

Operator response: Do not attempt to restart DB2 until the error is resolved. Notify the system programmer and collect the following diagnostic items:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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 *Utility Guide and Reference*.

Refer to *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

00D92025

Explanation: During restart, it was determined that at
least one unit of recovery (UR) was still active at the
previous termination of this DB2 subsystem and that
the subsystem was last started at a different release
level.

During migration to a new release or fallback to an
older release, all activity must be quiesced and there
should be no active units of recovery. DB2 restart will
fail until the situation is resolved.

System action: The restart terminates abnormally,
which terminates the subsystem. This action is to
prevent the loss or incorrect processing of a DB2 unit of
recovery. An SVC dump is scheduled and an entry is
created in SYS1.LOGREC.

Operator response: Do not attempt to restart DB2
until the error is resolved. Notify the system
programmer and collect the required items for problem
determination.

System programmer response: Because all work must
be quiesced before either migration or fallback of a DB2
subsystem, the recommended action is to restart the
DB2 subsystem at the release level that created the
outstanding unit or units of recovery and let the units
of recovery end normally.

You might need to use the RECOVER INDOUBT
command to resolve indoubt threads.

After all units of recovery have completed processing,
use the STOP DB2 command with MODE(QUIESCE) to
stop DB2. Then restart DB2 at the desired release level.
Using a different release level may require additional
migration or fallback actions.

If it is not possible to restart DB2 at the release level
that created the outstanding units of recovery, then a
cold start is required.

1. Print the BSDS using the DSNJU004 (print log map)
   utility.

2. Find the highest written RBA using the output from
   DSNJU004.

3. Use the DSNJU003 (change log inventory) utility to
   create a conditional restart record, specifying the
   same value for STARTRBA and ENDRBA. The RBA
   value must be an even multiple of 4096 (a
   hexadecimal value ending in 000) and should be
   rounded up from the highest written RBA as
   indicated by the DSNJU004 output.

Additional actions might be necessary to recover from
possible data inconsistencies.

Another option is to restore the DB2 logs and data to a
prior consistent point in time.

Problem determination: Collect the following
diagnostic items:

• 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.

• SVC dump (or system dump), taken to
  SYS1.DUMPxx data set, as result of an
  operator-initiated dump command or SLIP trap exit.

• Listing of SYS1.LOGREC data set, obtained by
  executing IFCEREP1.

| **Related concepts**

| ↪ Plans for backup and recovery (DB2
| Administration Guide)

| **Related tasks**

| ↪ Recovering from different DB2 for z/OS problems
| (DB2 Administration Guide)

| **Related reference**

| ↪ DSNJU003 (change log inventory) (DB2 utilities)

| ↪ DSNJU004 (print log map) (DB2 utilities)

| **Related information**

| ↪ DB2 and related commands (DB2 Commands)

| ↪ Recovering from unresolvable BSDS or log data set
| problem during restart (DB2 Administration Guide)

00D93001

Explanation: The commit/abort FRR (DSNRCAFR)
invoked DB2 subsystem termination, because an
unrecoverable error was detected 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 codes (IRLM
messages and codes).

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 codes (IRLM
messages and codes).

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 part 2 of *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:

* 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.
* Dynamic dump, taken to SYS1.DUMPxx data set, by
  DB2 (04E and 04F abends).
* Listing of SYS1.LOGREC data set, obtained by
  executing IFCEREP1.

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 codes (IRLM
messages and codes).

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.

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 Part 2 of *Utility 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.

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 Part 2 of *Utility 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 part 2 of *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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 (DSNRCAFR) 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.

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 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 initiates.

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 part 2 of *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).

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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 codes (IRLM messages and codes).

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.

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 Part 2 of *Utility 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.

System action: The agent is abnormally terminated. Because the agent is in a must-complete state, the DB2 subsystem 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 Part 4 of *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 codes (IRLM messages and codes).

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.

00D95011

Explanation: The recovery manager checkpoint (DSNRPBCW) FRR invoked DB2 subsystem termination, because an unrecoverable error was detected while performing its checkpoint functions.

This is a DB2 subsystem termination reason code. For further information, see IRLM abend codes (IRLM messages and codes).

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 original error.

00D96001

Explanation: The recovery manager's restart FRR invoked DB2 subsystem termination, because an unrecoverable error was detected during the restart processor (DSNRRPRC) processing.

This is a DB2 subsystem termination reason code. For further information, see IRLM abend codes (IRLM messages and codes).

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 original error.

00D96011

Explanation: The restart participation FRR invoked DB2 subsystem termination, because an unrecoverable error was detected while processing log records during restart.

This is a DB2 subsystem termination reason code. For further information, see IRLM abend codes (IRLM messages and codes).

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.

00D96021 • 00D96031

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 Chapter 33, "IRLM abend codes," on page 803.

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 Part 4 of *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 Chapter 33, "IRLM abend codes," on page 803.

System action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested for the abend 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.

System programmer response: Obtain a copy of the SYS1.LOGREC and the SVC dump for the original error. If you cannot correct the error, refer to Part 4 of *Administration Guide*.

Problem determination: At the time of the abend, registers 2 and 3 (as shown in the dump or in SYS1.LOGREC) contain the 6-byte relative byte address (RBA) of the last log record that was read before end-of-log was encountered.

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 codes (IRLM messages and codes).

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 codes (IRLM messages and codes).

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 part 2 of *Diagnosis Guide and Reference* 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.

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:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00D98001

Explanation: The recovery manager's common FRR (DSNRCRFR) 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 codes (IRLM messages and codes).

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 codes (IRLM messages and codes).

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 codes (IRLM messages and codes).

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 codes (IRLM messages and codes).

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.

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 codes (IRLM messages and codes).

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 codes (IRLM messages and codes).

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 CRCR 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 STARTRBA 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 STARTRBA to use for restart. If a STARTRBA 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:

- 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.
- Contents of the BSDS (both copies if dual BSDS in use) obtained by using the DB2 print log map (DSNJU004) utility.

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.

System action: The execution unit writes a record to SYS1.LOGREC and requests a SVC dump. Restart abends.

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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

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:

Register 0
> The data manager ERQUAL that identifies the place within the data manager filter routine where the error was detected

Register 2,3
> The RBA of the log record that was being read at the time of the error

00D99900

Register 8

The address of *ssnm*DBM1's selection block

Register 9

The address of DSCF' selection block

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.

Chapter 16. X'E2......' codes

Reason code identifiers that begin with 00E2 communicate normal and error situations with the storage manager.

00E20001

Explanation: The get variable storage function detected that input parameters passed by the invoker were invalid.

System action: The agent is abended.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

System action: The agent is abended.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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 *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.

00E20004 • 00E20006

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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

System action: The agent is abended.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

System action: The agent is abended.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E20006

Explanation: The free variable storage function detected that the block being freed was not allocated. That is, it was already free.

System action: The agent is abended.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).

- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E20007

Explanation: The allocate variable storage pool function detected that the input parameters passed by the invoker were invalid.

System action: The agent is abended.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E20008

Explanation: The free variable storage pool function detected that the input parameter (PHB, pool header block) did not represent an existing pool.

System action: The agent is abended.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E20009

Explanation: The get fixed blocks function detected that input parameters passed by the invoker were invalid.

System action: The agent is abended.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E2000A • 00E2000D

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.

System action: The agent is abended.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:

* 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.
* Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
* SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
* Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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 *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:

* 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.
* Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
* SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
* Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

System action: The agent is abended.

Operator response: Notify the system programmer.

System programmer response: Refer to *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. 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:

* 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.
* Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
* SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
* Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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 *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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 *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E2000F

Explanation: The free fixed block(s) 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.

System action: The agent is abended.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E20010

Explanation: The allocate fixed-block pool function detected an invalid input parameter passed by its invoker.

System action: The agent is abended.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

System action: The agent is abended.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E20012

Explanation: The get tracked storage from the GETMAIN function detected an invalid input parameter passed by its invoker.

System action: The agent is abended.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E20013

Explanation: The get tracked storage from GETMAIN function was unable to obtain sufficient storage in private area to satisfy an unconditional request.

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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).

- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E20014

Explanation: The free tracked storage function detected that the area 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: Refer to *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 storage and the storage class.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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: Refer to *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E20018

Explanation: The get stack storage function detected that the amount of storage requested by the invoker was less than or equal to zero.

System action: The agent is abended.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E20019

Explanation: The purge pool function detected that input parameters passed by the invoker were invalid.

System action: The agent is abended.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E2001A

Explanation: ESTAE recovery can not be established, because either an unexpected error occurred, or SCB is not available.

System action: The agent is abended.

System programmer response: Refer to *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E2001B

Explanation: The SETLOCK OBTAIN function issued a nonzero return code.

System action: The invoker of storage manager functions is abnormally terminated.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E2001C

Explanation: The purge stack function detected that one of the SKBs (stack block) is not valid and the SKB chain is possibly damaged.

System action: The SKB chain is repaired and processing continues.

Operator response: Notify the system programmer.

System programmer response: Refer to *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 EB for which the stack segments are to be purged.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E2001D

Explanation: Either GPVT (global pool anchor) or LPVT (local pool anchor) is damaged, and no storage managed by storage manager can be accessed.

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: Refer to *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E2001E

Explanation: The get stack storage function detected that two asynchronous (unrelated) agents use the same stack storage.

System action: The agent is abended.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).

- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).

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.

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 trace information has the address of the parameter list. The common service area (CSA) portion of the dump should be printed.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

System action: The invoker of the function 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. 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:

- 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.

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E20027

Explanation: The free variable storage function detected that unallocated storage in the block being freed has been modified.

System action: The agent is abended.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *Utility 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 (GPRs) contain the indicated diagnostic information:

GPR	Content
4	address of the pool header block (PHB)
7	value of the caller's saved register 14
11	address of the block to be freed

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.

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.

System action: The invoker is abended.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *Utility 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 7 contains the value of the stack segment (SKB).

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.

System action: The agent is abended.

Operator response: Notify the system programmer.

System programmer response: Refer to *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 (GPRs) contain the indicated diagnostic information:

GPR	Content
4	value of the pool header block (PHB)
7	address of the caller's saved register 14
11	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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

System action: The invoker is abended.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

Problem determination: Refer to the originating abend code.

00E2002C

Explanation: DB2 detected that the free chain in a data space was damaged.

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 part 2 of *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E2002D

Explanation: DB2 is unable to create a 64-bit object.

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 *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E2002E

Explanation: DB2 detected an internal error during the freeing of data space storage.

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 part 2 of *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E2002F

Explanation: DB2 detected an internal error during the freeing of data space storage.

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 part 2 of *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E20030

Explanation: DB2 detected that the free chain in a 64-bit object was damaged.

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 part 2 of *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E20031

Explanation: DB2 is unable to create a 64-bit object.

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 part 2 of *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E20032

Explanation: DB2 detected an internal error while processing storage. This abend reason code is issued by the CSECT indicated in the dump title.

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 part 2 of *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.

00E20033

Explanation: The amount of combined real and auxiliary storage used by the DB2 address space has reached or exceeded the maximum amount allowed by the specification on subsystem parameter, SPRMRSMX.

System action: The DB2 subsystem abnormally terminated with RC00E20033. A dump and logrec entry may have been issued and DB2 terminated with DSNV086E.

Operator response: Notify the system programmer.

System programmer response: Refer to *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 value that you specified can be found in subsystem
| parameter, SPRMRSMX, and the amount of the
| combined real and auxiliary storage used is recorded in
| the dump.

| Collect the following diagnostic items:

| • 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.

| • Dynamic dump, taken to SYS1.DUMPxx data set, by
| DB2 (04E and 04F abends).

| • SVC dump (or system dump), taken to
| SYS1.DUMPxx data set, as result of an
| operator-initiated dump command or SLIP trap exit.

| • Listing of SYS1.LOGREC data set, obtained by
| executing IFCEREP1.

| and IFCID225 records.

Chapter 17. X'E3......' codes

Reason code identifiers that begin with 00E3 communicate normal and error situations with the service controller.

00E30001

Explanation: A service controller internal inconsistency has been encountered. This is probably a DB2 subsystem 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. Refer to part 2 of *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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 part 2 of *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 CTSIRCOD fields of the cursor table pointed to by register 7 in the SDWA.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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 *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:

0 (0) 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.

2 (2) Error return code from the invoked subcomponent

4 (4) Error reason code from the invoked subcomponent

8 (8) Pointer 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
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
Bit 8	1 if the LOB Manager initialization is completed
Bit 9 â⌢ 31	Not used

C (12) Pointer to invoked subcomponent's RMFT.

From this information the appropriate subcomponent's startup process may be identified.

Collect the following diagnostic items:
- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E30005

Explanation: A service task could not be created during the database services initialization process. This is probably a DB2 error.

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 part 2 of *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:

0 (0)	Should equal X'3'
2 (2)	Return code from the service task creation function of the agent services manager (ASM) subcomponent
4 (4)	Abend reason code from the service task creation function of the agent services manager (ASM) subcomponent
8 (8)	Not used
C (12)	Not used

Collect the following diagnostic items:
- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E30006

Explanation: A service task could not be created during the database services delete process. This is probably a DB2 error.

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 part 2 of *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:

0 (0)	Should equal X'3'

2 (2) Return code from the service task creation function of the agent services manager (ASM) subcomponent

4 (4) Abend reason code from the service task creation function of the agent services manager (ASM) subcomponent

8 (8) Not used

C (12) Not used

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E30008

Explanation: DSNTSTR2 loaded an incorrect version of the system parameter CSECT DSN6SPRM while DB2 was executing. Message DSNT103I is generated before the abend occurs.

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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Listing of DSNZPARM module used.

00E3000A

Explanation: A bad recovery element was detected by the database services standard ESTAE and FRR recovery routines. This is probably a DB2 subsystem error.

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 part 2 of *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E3000B

Explanation: The database services section (DSN6SPRM) in the DB2 initialization parameter module (DSNZPARM) does not exist.

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 *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:

0 (0) Should equal X'1'

2 (2) Return code from the get descriptor function of the system parameter manager (SPM) subcomponent of DB2

4 (4) Not applicable

8 (8) Not applicable

C (12) Not applicable

First, ensure that DSNZPARM was installed correctly. Then, using the return code from SPM, determine why the descriptor is not available.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).

00E3000C • 00E3000F

- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Listing of DSNZPARM module used.

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.

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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E3000D

Explanation: A failure occurred and was detected while an ESTAE functional recovery was being established.

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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E3000E

Explanation: The execution unit supporting the database services checkpoint process has abended. The CSECT involved in the abend writes a record to SYS1.LOGREC and requests an SVC dump.

System action: DB2 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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E3000F

Explanation: The database services functional recovery load module, DSNTF, has an unrecognizable entry point.

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 *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:

0 (0)	Should equal X'4'
2 (2)	Not applicable
4 (4)	Not applicable
8 (8)	Not applicable
C (12)	Not applicable

The abend is generated whenever the DB2 load module DSNTFEPL is not link-edited with a load module entry point name of DSNTF. To correct this, link-edit DSNTFEPL again with the correct entry point name.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E30010

Explanation: The database services initialization process could not read the DB2 bootstrap data set (BSDS).

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 *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:

0 (0)   Should equal X'2'

2 (2)   Return code from a BSDS read request function of the recovery log manager (RLM) subcomponent

4 (4)   Abend reason code from a BSDS read request function of the recovery log manager (RLM) subcomponent

8 (8)   Not applicable

C (12)   Not applicable

Collect the following diagnostic items:
- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

- Contents of the BSDS (both copies if dual BSDS in use) obtained by using the DB2 print log map (DSNJU004) utility.

00E30013

Explanation: The value specified in the DSN6SYSP CSECT to define reserve storage is either negative or zero.

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:
- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Listing of DSNZPARM module used.

00E30014

Explanation: The value specified in the DSN6SYSP CSECT to define reserve storage for a 'must complete' process is either negative or 0.

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='

Problem determination: Collect the following diagnostic items:
- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.

- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Listing of DSNZPARM module used.

00E30017

Explanation: While loading the DB2 database services function recovery and emergency shutdown modules, the Service Controller function abends with this reason code. This is because it detected a load module which was loaded with an invalid addressing capability. The abend is preceded by message DSNT107E.

System action: DB2 database services startup is terminated.

System programmer response: Refer to message DSNT107E.

Problem determination: Refer to message DSNT107E.

00E3001B

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.

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.

00E30021

Explanation: A processing error has occurred during authorization checking.

System action: The request to allocate a plan to the authorization ID is denied.

Operator response: Notify the system programmer.

System programmer response: Refer to *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 the SYSLOG data set for the period of time spanning the failure.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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.

System action: The request to allocate a plan to the authorization ID is denied.

Operator response: Notify the system programmer.

System programmer response: Refer to *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 the SYSLOG data set for the period of time spanning the failure.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E30036

Explanation: A processing error has occurred during authorization checking.

System action: The IRLM query request is denied.

Operator response: Notify the system programmer.

System programmer response: Refer to *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 the SYSLOG data set for the period of time spanning the failure.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E30037

Explanation: An internal logic error occurred while invoking a distributed transaction manager function.

System action: DB2 writes a SYS1.LOGREC record and requests a SVC dump.

Operator response: Collect the SYS1.LOGREC listing and the SVC dump.

System programmer response: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E30040

Explanation: An internal logic error occurred while the catalog access function was being invoked.

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: Refer to *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:

Register

	Contents
0	Address of the catalog access package parameter list
2	Catalog access return code
3	Catalog access reason code
4	Data manager return code
5	Data manager reason code
7	CT address

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E30041

Explanation: An internal error occurred when trying to obtain a limit from the resource limit specification table.

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 *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 the SYSLOG data set for the period of time spanning the failure.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E30063

Explanation: The BIND PACKAGE or the CREATE PROCEDURE request caused more records than is allowed, to be inserted into SYSPACKSTMT. In DB2 Version 9.1 conversion mode, the request has exceeded the SYSPACKSTMT limitation of 32767 records to be inserted into SYSPACKSTMT. In DB2 Version 9.1 new-function mode, the request has exceeded the SYSPACKSTMT limitation of 2 gigabytes records for a package.

System action: The BIND PACKAGE subcommand or the CREATE PROCEDURE SQL statement fails.

User response: Break the application into smaller applications so that packages have fewer records.

Severity: 8 (error)

00E30065

Explanation: The service controller's BIND processor detected an error in the user's database request module (DBRM) while building the SYSDBRM record.

System action: The BIND command fails.

Operator response: Notify the system programmer.

System programmer response: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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.

Problem determination: Collect the following diagnostic items:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.

- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E30066

Explanation: The service controller's BIND processor has detected an invalid release dependency mark in the cursor table.

System action: The BIND command fails.

Operator response: Notify the system programmer.

System programmer response: Refer to *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 the SYSLOG data set for the period of time spanning the failure.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

The service controller module DSNTBBP detected an unknown value in the CTRELDEP field of the BIND CT. The BIND CT is pointed to by GPR7 at the time of the abend and is mapped by DSNDCT. The one byte CTRELDEP field should have been set by the RDS BIND processor (DSNXEPR) or one of the functions it invokes.

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.

System programmer response: Obtain a copy of SYS1.LOGREC and the SVC dump.

Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: Register 2 contains an indication of the type of parameter as follows:

00000101
Input parameter list.

00000102
Communication information block (CIB).

00000103
Invalid BIND subcommand name. Registers 3 and 4 contain the invalid subcommand name.

00000104
Subcommand information block (SIB).

00000201
DBRM member name list.

00000202
Plan-ID list.

00000203
Message block in user storage. Other register contents are as follows:

R3	R4	
<	4	Simple reference
		• R8 = zero
>0	>4	MVCL
		• R8 = From address
		• R4 = move length
		To and from lengths are equal.
0	>4	GETMAIN for user storage failed
		• R4 = storage length required
		• R8 = GETM
		To fix this problem, increase your region size.
<0	>4	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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).

- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Listing of the DSNTRACE data set for the DSN (TSO attachment facility) session involved in the problem.

00E30068

Explanation: A function invoked by a BIND subcommand has returned an unexpected error.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested. The BIND subcommand is terminated.

System programmer response: This is an internal DB2 error. Obtain a copy of SYS1.LOGREC and the SVC dump. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E30069

Explanation: An attempt to allocate a cursor table (CT) failed.

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 part 2 of *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).

- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested. The requesting execution unit is abended.

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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: If IRLM abended, and if you suspect an error in DB2, refer to Part 2 of *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Listing of DSNZPARM module used.
- IRLM trace output.

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.

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 Part 2 of *Utility 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 DSN6SPRM 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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Listing of DSNZPARM module used.
- IRLM trace output.

00E30072

Explanation: An error was encountered during an IRLM lock query request.

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 part 2 of *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 IRLM messages and codes (IRLM messages and codes) for information identifying IRLM return and reason codes.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- IRLM trace output.

00E30073

Explanation: An unrecoverable system error occurred while processing a LOCK or UNLOCK request.

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 part 2 of *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- IRLM trace output.

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.

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 *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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 DSNT383I is issued.

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 part 2 of *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

- Listing of the IRLM procedure.

00E30076

Explanation: An attempt to sign-off from IRLM failed.

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 part 2 of *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E30077

Explanation: A database command processor encountered an error when attempting to create a cursor block (CUB) on a DB2 catalog table.

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 part 2 of *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.

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.

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 Part 2 of *Utility Guide and Reference* for information on identifying and reporting the problem.

Problem determination: In the SVC dump, register 2 contains the 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'4004' indicates that the identify function code (51, X'33') does not exist in the IRLM SSVT. This may be due to the operator issuing a stop IRLM command followed by a start DB2 command before the IRLM has completed termination processing. The sequence of commands can be determined from the system console log.

A reason code of X'4008' 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:
- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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00E3007A

Explanation: DB2 encountered an IRLM request error indicating that IRLM is not available to take requests.

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.

Refer to *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:
- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E3007B

Explanation: An IRLM operation returned a non-zero return code.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested. The application abnormally terminates.

Operator response: Notify the system programmer.

System programmer response: Check whether system activities at the time of the abend caused unexpected results from the IRLM operation. Check the system for any IRLM-related problems that can cause the operation to fail. If necessary, obtain a copy of SYS1.LOGREC, the SVC dump, and lock traces at the time of the abend. Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Check the system for any unusual IRLM activities or messages at the time of the abend.

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.

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 *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:
- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Listing of the IRLM procedure.

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.

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 Part 2 of *Installation Guide* for additional information.

Problem determination: Collect the following diagnostic items:
- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Listing of DSNZPARM module used.
- Listing of the IRLM procedure.

00E30082

Explanation: IRLM discovered a bad request parameter list (RLPL). This may occur if the RLPL storage is overlaid while an agent is suspended.

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 part 2 of *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:
- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E30083

Explanation: This agent has been selected as the victim of a deadlock or timeout.

This reason code is not used in abends.

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.

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 part 2 of *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.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested. The command is abended 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 part 2 of *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 8.

00E30086

Explanation: An error was indicated by the data manager (DM) subcomponent. This is probably an internal DB2 error.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested. The command is abended 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 error. Obtain a copy of SYS1.LOGREC and the SVC dump. Refer to part 2 of *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.

00E30089

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.

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.

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: Refer to *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:
- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E30091

Explanation: A failure was detected during the retry process of DB2 recovery.

System action: DB2 is abended 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 part 2 of *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:
- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E30092

Explanation: A retry recovery failure has been detected. This is a critical error.

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 Part 2 of *Utility 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:

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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:

00E30096

Explanation: DB2 is unable to acquire a modify lock. Lock negotiation failed because this request was involved in lock negotiation with other DB2 subsystems and the request was denied.

System action: A 'resource unavailable' condition is returned to the user. This reason code, the resource type, and the resource name are also returned.

System programmer response: Determine why the lock request failed. One possible cause of the lock request failure is if another DB2 subsystem in the DB2 data sharing group is abnormally terminating.

User response: Resubmit the request.

Problem determination: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00E30097

Explanation: DB2 encountered an IRLM error indicating that IRLM detected an 'out of record list' storage condition.

The record list is a part of the coupling facility lock structured that contains the 'modify locks' (those locks that would be retained in case of a failure).

System action: DSNT500I or SQLCODE -904 is returned to the user. This reason code and the resource name are also returned.

Operator response: Notify the system programmer.

System programmer response: The coupling facility lock structure is declared too small. If this condition becomes a prevalent problem, you need to redistribute the coupling facility lock structure storage resource to make more room for the record list. You can make room for the record list in on of two ways:

- Issue a rebuild.
- Dynamically change the lock structure size.

Refer to DB2 Data Sharing: Planning and Administration for more details about these options.

00E30099

Explanation: A conversion error occurred during DB2 startup. This conversion is used to determine if conversion services are set up correctly.

System action: DB2 terminates.

User response: See message DSNT552I to resolve the problem.

00E3009A

Explanation: During DB2 startup, DB2 detected a difference between the CCSIDs recorded in the BSDS and the CCSIDs specified by the version of DSNHDECP that was loaded during startup. DB2 startup terminated to avoid potential data corruption issues. Message DSNT108I is generated before the abend occurs.

System action: Subsystem startup is terminated.

Operator response: See message DSNT108I.

System programmer response: Determine the reason for the termination of DB2 startup. See message DSNT108I.

Problem determination: See message DSNT108I.

00E3009B

Explanation: DB2 detected an invalid CCSID specification during startup. DB2 startup has terminated to avoid potential data corruption issues. Message DSNT109I is generated before the abend occurs.

System action: Subsystem startup is terminated.

Operator response: See message DSNT109I.

System programmer response: Determine the reason for the termination of DB2 startup. See message DSNT109I.

Problem determination: See message DSNT109I.

00E3009E

Explanation: The plan depends on new facilities of the release from which fall back has occurred.

System action: The allocation for the user failed.

System programmer response: Warn the user community NOT to run this plan until you have remigrated to the newer release.

User response: Do not use this plan until your DB2 subsystem is 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.

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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E30101

Explanation: The result of issuing a SETFRR macro indicates that this FRR is not the top FRR.

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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E30104

Explanation: This reason code is used by the service controller (SC) subcomponent to respond NO on a prepare-to-commit notification.

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 DXRxxxE to determine the root cause of the failure and the appropriate corrective action.

Problem determination:

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.

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.

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.

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 binding function to indicate that the package that is currently being allocated is not operational.

If a package becomes invalid, the VALID column in the SYSIBM.SYSPACKAGE table is set to a value other than Y. The next time that the package is allocated, automatic rebinding is triggered.

If automatic rebinding is successful, then the package becomes valid again. (The value in the VALID column is changed to Y.) If the rebinding is not successful, then the package remains invalid and becomes inoperative. (The value in the VALID column stays the same and the value of the OPERATIVE column is changed to N.) The allocation fails, and this code is issued.

System action: Agent allocation fails or DROP package fails.

System programmer response: Determine what made the package not operational, and issue a REBIND subcommand for the package.

Related concepts

➡ Automatic rebinding (Application programming and SQL)

Related reference

➡ SYSIBM.SYSPACKAGE table (DB2 SQL)

➡ REBIND PACKAGE (DSN) (DB2 Commands)

00E30306

Explanation: This reason code is returned when the automatic bind for plan is disabled. The automatic bind is disabled through the installation process.

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.

00E30405

Explanation: This subcode is found in register 2 to clarify abend reason code X'00E30077'. See X'00E30077' for more information.

00E30406

Explanation: This subcode is found in register 2 to clarify abend reason code X'00E30077'. See X'00E30077' for more information.

00E30407

Explanation: This subcode is found in register 2 to clarify abend reason code X'00E30077'. See X'00E30077' for more information.

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.

System action: The current SQL statement contains an SQLCODE -905.

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 Part 2 of *Utility Guide and Reference* for information on identifying and reporting the problem.

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.

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: Ensure that the statement in your IRLM startup procedure is referencing the correct IRLM code library and that

| IRLM is at the appropriate level of maintenance

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:

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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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.

Problem determination:

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:

00E30808

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: A record is written to SYS1.LOGREC and 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:

00E30809

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:

Chapter 18. X'E4......' codes

Reason code identifiers that begin with 00E4 communicate normal and error situations with DB2 utilities.

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.

00E400B0

Explanation: Utilities invocation of CREATE THREAD has ended abnormally.

System action: The utility job step is terminated. No record of the utility job step remains in the system.

System programmer response: Determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.

- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E400E1

Explanation: An attempt to modify one of the real-time statistics tables in the catalog information was unsuccessful.

System action: Utilities processing abends. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

System programmer response: If DSNT500I was not issued and register 2 contains an undocumented reason code, it is an internal IBM code. Collect the information that is identified in the problem determination section and contact IBM Software Support.

User response: Correct the "resource unavailable" condition that was identified by the DSNT500I message. Either restart the utility from the last checkpoint, 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 among the other DB2 reason codes, notify the system programmer.

Problem determination: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.

Related information

↪ DSNT500I (DB2 Messages)

00E400A1

Explanation: Utility has detected the number of database objects to be processed exceeds the maximum amount allowed.

System action: The utility job is abended, and the utility is placed in the stopped state.

System programmer response: The utility cannot be restarted. An operator with SYSOPR authority can issue the -TERM UTILITY command to release the resources claimed by the stopped utility.

00E400D0

Explanation: A conversion error occurred during the conversion of a string to a different coded character set.

This code typically accompanies message DSNU299I, which can provide additional information.

System action: The utility job abends. The dump is suppressed.

User response: Review the contents of message DSNU299I and take the appropriate action.

Problem determination: If the problem persists, contact IBM Software Support. Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.

- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.
- The dump from an execution of the utility with the DIAGNOSE ALLDUMPS statement in the utility job.

If you suspect an error in DB2, refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Related information

↪ DSNU299I (DB2 Messages)

00E400AF

Explanation: A DSNGDALT macro invocation has returned a nonzero return code. An attempt to modify a DBD by setting the OBDIFIB bit on was unsuccessful.

System action: Processing is abended.

System programmer response: Determine the failing environment. If you suspect an error in DB2, refer to Part 2 of *Utility Guide and Reference* for information on identifying and reporting the problem.

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.

Problem determination: Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E4E2D7

Explanation: This abend is issued by the DB2-supplied utility stored procedures DSNUTILS or DSNUTILU. An unexpected SQL error occurred during the execution of the stored procedure. These errors are usually caused by an environment or installation problem.

System action: The stored procedure abnormally terminates with SQLCODE -471.

System programmer response: Check the WLM address space for the routine that is specified in the message for the -471 SQLCODE to determine the cause of the problem. Review the installation process and ensure that the correct levels of libraries were used, and that all of the installation steps were followed.

User response: Notify the system programmer.

Problem determination: If you cannot correct the problem, gather information about the failing environment.

Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

• 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.
• Detailed description of events immediately prior to and during the abend.
• Output from the BIND attempt.
• All dumps created by this failure.

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.

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 part 2 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:

• 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.

• Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
• 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.
• UTPRINT output, produced by utility invocation of SORT.
• Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
• SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E400E0

Explanation: An attempt to modify the catalog information was unsuccessful.

System action: Utilities processing abends. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

System programmer response: If DSNT500I was not issued and register 2 contains an undocumented reason code, it is an internal IBM code. Collect the information that is identified in the problem determination section and contact IBM Software Support.

User response: Correct the "resource unavailable" condition that was identified by the DSNT500I message. Either restart the utility from the last checkpoint, 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 among the other DB2 reason codes, notify the system programmer.

Problem determination: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

• 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.
• SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
• SYSABEND, SYSUDUMP, or SYSMDUMP output.
• Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
• 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.
| • UTPRINT output, produced by utility invocation of
| SORT.
| **Related information**
| ➡ DSNT500I (DB2 Messages)

00E400C0

| **Explanation:** This code is issued for the following
| situations:
| • A -STOP DB2 MODE(FORCE) command has been
| entered while a utility was executing.
| • 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.
| • During abnormal system termination.

System action: Utility processing is abended.

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.

User response: Notify the system programmer.

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.

System programmer response: Determine the failing environment.

User response: Notify the system programmer.

Problem determination: Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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.

System programmer response: Determine the failing environment.

User response: Notify the system programmer.

Problem determination: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00E4D5D2

Explanation: This abend is placed at logic points that will occur only through a programming error.

System action: Utility processing abends.

User response: Any 00E4D5D2 is an internal error. The abend message identifies the module and offset that is in error.

Problem determination: Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00E400C3

Explanation: An error was detected during the restart of a utility that uses a TEMPLATE name specification to dynamically allocate the data sets. The data sets that need to be reused for restart were not found.

System action: Utility processing is abended.

User response: Examine the JCL and ensure that the TEMPLATE control statement specifies the correct disposition for the data sets. Further analysis might be needed.

Problem determination: This abend is forced to allow restart of the utility when work data sets are used and the disposition is not MOD, DELETE, and CATLG (for example, not

```
DISP=(MOD,DELETE,CATLG)
```

).

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.

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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:
• 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.
• Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
• Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E40001

Explanation: No cursor table was present at entry to database services portion of utility.

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 Part 2 of *Utility 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 the SYSLOG data set for the period of time spanning the failure.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40002

Explanation: The caller of the database services portion of the utility was in the wrong protect key.

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.

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 Part 2 of *Utility Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40003

Explanation: An error occurred while getting FRBPARM from application storage.

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 Part 2 of *Utility 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:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40004

Explanation: An error occurred while getting FRB from application storage.

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 DSNUTILB. If you suspect an error in DB2, refer to Part 2 of *Utility 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:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40005

Explanation: A nonzero reason code was returned from MVS sort.

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.

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).

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.

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:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40006

Explanation: An error was detected while manipulating the utility-in-progress bits of the database exception table (DBET). The error might occur due to one of the following conditions:

- The SYSIBM.SYSUTIL table and the DBET are out of sync.
- The utility-in-progress condition was not properly reset after execution of a prior utility.
- A resource unavailable condition exists.

System action: Utility processing is abended. This abend might be accompanied by message DSNT500I. An SDUMP might be requested.

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 SYSUTIL 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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: If applicable, correct the resource unavailable condition identified by the DSNT500I message. For an explanation of resource types, see . 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.

Problem determination: If the condition cannot be corrected, determine the failing environment.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.
- Copy of the log for this period, so that additional DSN1LOGP reports can be produced for problem determination.

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.

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.

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 *Messages* for Problem Determination. Otherwise, determine the failing environment.

Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: If the abend was accompanied by a DSNT500I message, look up DSNT500I in *Messages* 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.

Problem determination: This is an internal error.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

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00E40009

Explanation: An error was detected while attempting to access the target object (table space or index space).

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.

Problem determination: If the condition cannot be corrected, determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

* 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.
* Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
* 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.
* UTPRINT output, produced by utility invocation of SORT.
* Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
* SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E4000A

Explanation: An error has been detected while force closing a page set.

System action: Utilities processing is abended.

System programmer response: This is an internal error. Determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: Collect the following diagnostic items:

* 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.
* Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
* 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.
* UTPRINT output, produced by utility invocation of SORT.
* Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
* SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E4000C

Explanation: This is an internal control error. The utility subcomponent that manages the function control flow associated with DB2 database services has been requested to perform a function that it does not recognize.

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 (this might not be necessary).

System programmer response: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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.

Problem determination: Collect the following diagnostic items:

* 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.
* Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
* 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.
* UTPRINT output, produced by utility invocation of SORT.

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E4000D

Explanation: An error was detected while scanning or updating table SYSIBM.SYSUTIL.

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 Appendix F, "Resource types," on page 883 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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E4000E

Explanation: An error was detected while attempting to create a cursor block (CUB).

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. For more information, refer to the explanation of message DSNT500I in *Messages*. Refer to Appendix F, "Resource types," on page 883 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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

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 Appendix F, "Resource types," on page 883 in 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.

00E40010 • 00E40012

If the condition cannot be corrected, determine the failing environment.

Problem determination: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00E40010

Explanation: A request to IRLM on behalf of a DB2 utility to lock a page or an entire table space has failed. This is either an internal DB2 or an IRLM problem. The error occurred in the database services address space.

System action: The utility job is abended. An SVC dump is requested (with the address of the IRLM parameter list, RLPL, in register 4). The utility is placed in the stopped state.

Operator response: An operator with SYSOPR authority can issue the -TERM UTILITY command to free resources (this might not be necessary).

System programmer response: Check the IRLM return and reason codes in the RLPL. If you suspect an error in DB2, refer to Part 2 of *Utility Guide and Reference* for information on identifying and reporting the problem.

User response: Consult the system programmer to diagnose the problem. Determine if the utility should be terminated.

Problem determination: Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40011

Explanation: An attempt to extend the error range information in the database allocation table (DBAT) failed.

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.

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 Part 2 of *Utility Guide and Reference* for information on identifying and reporting the problem.

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.

Problem determination: This is an internal error.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40012

Explanation: An error was detected while attempting to find a database descriptor block (DBD) address.

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 Appendix F, "Resource types," on page 883 in 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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.
- UTPRINT output, produced by utility invocation of SORT.

00E40013

Explanation: An error was detected while creating a ECB exit for -STOP DB2.

System action: Utilities processing is abended.

System programmer response: Determine the failing environment. If you suspect an error in DB2, refer to Part 2 of *Utility Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40014

Explanation: An error was detected from the terminate thread function.

System action: Utilities processing is abended.

System programmer response: Determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

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.

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.

Operator response: An operator with SYSOPR authority can issue the -TERM UTILITY command to free resources (this might not be necessary).

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.

Problem determination: Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

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.

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 *z/OS DFSMSdfp Diagnosis Reference*.

Refer to *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 the SYSLOG data set for the period of time spanning the failure.

- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40017

Explanation: An error was detected from terminate identify.

System action: Utilities processing is abended.

System programmer response: Determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:
- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

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.

System action: Utility processing is abended.

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.

User response: Notify the system programmer.

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.

System action: Utility processing is abended.

System programmer response: Determine the failing environment.

User response: Notify the system programmer.

Problem determination: This is a DB2 internal error. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

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 DFSPARM data set was present in the job JCL, the DFSPARM 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 DFSPARM 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 DFSPARM 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).

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 Appendix F, "Resource types," on page 883 in 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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.

00E4001D • 00E4001F

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E4001D

Explanation: An error was detected while attempting to read a row from the SYSIBM.SYSSYNONYMS table.

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 Appendix F, "Resource types," on page 883 in 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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E4001E

Explanation: An error was detected while attempting to read a row from the SYSIBM.SYSTABLES table.

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.

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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.

00E4001F

Explanation: An error was detected while attempting to read a row from the SYSIBM.SYSINDEXES table.

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 Appendix F, "Resource types," on page 883 in 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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40020

Explanation: An error was detected while attempting to RARQ to the database storage.

System action: Utilities processing is abended.

System programmer response: Determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:
- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

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.

System action: Utility processing is abended.

System programmer response: Make the resource available and either -TERM the utility and resubmit it, or resubmit the utility with the RESTART parameter. For more information, refer to the explanation of message DSNT500I in *Messages*. If you suspect an error in DB2, refer to Part 2 of *Utility Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This abend is accompanied by the message DSNT500I, that identifies the unavailable resource. The message is written to the SYSPRINT data set.

00E40022

Explanation: An error was detected while attempting to read a row from the SYSIBM.SYSUTIL table.

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 Appendix F, "Resource types," on page 883 in 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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:
- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

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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.

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 part 2 of *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

- REPAIR dump of all SYSUTIL pages.

00E40024

Explanation: Internal protocols required for utility serialization were violated. Specifically, utility serialization cleanup was not invoked upon completion of utility processing.

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 Part 2 of *Utility Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic item listed in

- REPAIR dump of all SYSUTIL pages.

00E40025

Explanation: Utility processing attempted to allocate resources for this utility job step. The allocate protocol has returned a nonzero return code.

System action: Utilities processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

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.

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 Appendix F, "Resource types," on page 883 in 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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40027

Explanation: An error has been detected while attempting to update a row of the SYSIBM.SYSUTIL table.

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 Appendix F, "Resource types," on page 883 in 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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40028

Explanation: An error has been detected while attempting to COMMIT.

System action: Utilities processing is abended.

System programmer response: Determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40029

Explanation: An error has been detected while attempting to read a row from the SYSIBM.SYSUTIL table.

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 Appendix F, "Resource types," on page 883 in 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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E4002A

Explanation: During utility restart processing, a record in the SYSUTILX checkpoint/restart area was not recognized. The utility might not be restartable.

System action: Utility processing is abended.

00E4002B • 00E4002E

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 part 2 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:
- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- DSN1LOGP detail report that contains log records associated with the damaged page.
- Detailed description of events immediately prior to and during the abend.
- UTPRINT output, produced by utility invocation of SORT.
- All dumps taken by the attachment facility or requesting application.

00E4002B

Explanation: The utility check pending protocol detected invalid parameters for the setting or resetting of the check pending state.

System action: The utility job is abended.

System programmer response: Determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:
- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

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.

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.

System programmer response: Determine the failing environment. If you suspect an error in DB2, refer to Part 2 of *Utility Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

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:
- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

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.

System programmer response: Determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Unformatted DSN1PRNT output of the DSNDB01.DBD01 page set. Use the method described in Part 5 of *Diagnosis Guide and Reference* to locate the inconsistent DBD in the DSNDB01.DBD01 page set.

00E40030

Explanation: A -DISPLAY UTILITY or -TERM UTILITY command has failed in the command subsystem.

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 Part 2 of *Utility 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:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40033

Explanation: Internal control blocks were scanned for internal IDs representing the SYSIBM.SYSUTIL table. No corresponding ID was found.

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 part 2 of *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

- REPAIR dump of all SYSUTIL pages.

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.

System action: Utility processing abends. No SYSABEND 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.

System action: Utility processing is abended.

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 Part 2 of *Utility Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer so that the pending condition can be resolved.

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.

System action: Utility processing is abended and the utility is placed in a stopped state.

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 Part 2 of *Utility Guide and Reference* for information on identifying and reporting the problem.

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.

Problem determination: Refer to the description for message DSNT500I.

Refer to Appendix F, "Resource types," on page 883 in for an explanation of resource type codes.

00E40045

Explanation: A failure has occurred during an attempt to free storage.

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 part 2 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:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40051

Explanation: Invalid OTYPE was passed to 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 part 2 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:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.

• Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.

• SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40053

Explanation: An invalid OBID of zero was found by the module that maps external object names to OBIDs.

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 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 Part 2 of *Utility Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

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 a index is found in the SYSIBM.SYSINDEXES table. If the object exists, the OBID cannot be zero.

Collect the following diagnostic items:

• 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.

• Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

• 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.

• UTPRINT output, produced by utility invocation of SORT.

• Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.

• SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

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.

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.

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.

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.

Problem determination: Collect the following diagnostic items:

• 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.

• Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

• 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.

• UTPRINT output, produced by utility invocation of SORT.

• Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.

• SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

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.

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.

Operator response: An operator with SYSOPR authority can terminate the utility and release any held resources (this might not be necessary).

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.

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 SYSLOG 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:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40072

Explanation: An error was encountered while processing a BSAM data set.

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.

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 Part 2 of *Utility Guide and Reference* for information on identifying and reporting the problem.

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.

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:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

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.

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 part 2 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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.

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.

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 part 2 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:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Source listing of the failing application program.
- 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.

00E40075

Explanation: An end-of-data (EOD) has been encountered while attempting to reposition an input data set during the restart of a utility.

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:

- 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.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.
- 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.

00E40076

Explanation: The DYNALLOC SVC returned an unexpected return code when attempting to deallocate a data set.

System action: Processing is halted.

Operator response: If necessary, an operator with SYSOPR authority can issue the -TERM UTILITY command to release the resources claimed by the stopped utility.

System programmer response: This error may occur for a data set allocated by a JCL DD card or by a TEMPLATE utility control statement. If the problem determination indicates an error in the way the data set was specified, fix the JCL DD card or the TEMPLATE control statement and resubmit the job. If a problem is indicated in the I/O subsystem, then correct the problem before resubmitting the job.

User response: If the problem persists, then notify the system programmer.

Problem determination: The abend code is accompanied by message DSNU031I which provides the data set name, return code and reason code values returned from the dynamic allocation request. Refer to *MVS/ESA Programming: Authorized Assembler Services Guide* for a complete description of the possible return and reason codes from DYNALLOC. Error messages in the job log might give more information about the problem. Analyze these messages to determine the source of the error and the actions required to correct the error.

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.

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:

* 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.
* Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
* 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.
* UTPRINT output, produced by utility invocation of SORT.
* Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
* SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40080

Explanation: An error has been detected during utility termination cleanup. The DSNXKACC CLOSEALL protocol has returned an error.

System action: The utility job step is placed in the stopped state.

Problem determination: This abend code might be accompanied by a DSNT500I error message that might indicate a correctable problem.

If the DSNT500I message has not been issued or if the problem can not be corrected, collect the following diagnostic items:

* 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.
* Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
* 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.
* UTPRINT output, produced by utility invocation of SORT.
* Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
* SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

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.

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 part 2 of *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

* REPAIR dump of all SYSUTIL pages.

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.

System action: Utility processing is abnormally terminated and the utility is placed in a stopped state. An SDUMP is requested.

System programmer response: Determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: The -TERM UTIL command can be issued to free resources held by the failing utility.

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.

System action: Utility processing is abnormally terminated and the utility is placed in a stopped state. An SDUMP is requested.

System programmer response: Determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Issue the -TERM UTIL command to free resources held by the failing utility.

00E40085

Explanation: A utility serialization LOCK or UNLOCK request has received an error from the IRLM. Either message DSNU099I is issued prior to this abend code to provide information about the error or message DSNI002I is issued if the problem occurred while running the START DATABASE ACCESS(FORCE) command.

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.

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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem. For the START DATABASE command, no response is needed.

User response: Notify the system programmer. An attempt can be made to restart the utility or rerun the START DATABASE command.

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.

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 part 2 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:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40091

Explanation: Utility access path creation was invoked specifying an incorrect OBID.

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 part 2 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:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.

- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40096

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.

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 part 2 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:
- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40100

Explanation: DB2 failed during execution of the DSNBGETP macro.

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. Refer to part 2 of *Diagnosis Guide and*

Reference for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:
- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40101

Explanation: DB2 failed during execution of the DSNBSETW macro.

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. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:
- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.

- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40102

Explanation: The data manager subcomponent of DB2 failed during execution of the DSNICCOB macro.

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. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40103

Explanation: The data manager subcomponent of DB2 failed during execution of the DSNICCUB macro.

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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40104

Explanation: The data manager subcomponent of DB2 failed during execution of the DSNIDISP macro.

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. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.

- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40105

Explanation: The data manager subcomponent of DB2 failed during execution of the DSNIDLET macro.

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 Appendix F, "Resource types," on page 883 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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40106

Explanation: The data manager subcomponent of DB2 failed during execution of the DSNILRDO macro.

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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40107

Explanation: The data manager subcomponent of DB2 failed during execution of the DSNIISRT macro.

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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40108

Explanation: The data manager subcomponent of DB2 failed during execution of the DSNINEXH macro.

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 Appendix F, "Resource types," on page 883 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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40109

Explanation: The data manager subcomponent of DB2 failed during execution of the DSNIPGER macro.

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 Appendix F, "Resource types," on page 883 in 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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E4010A

Explanation: DB2 failed during execution of the DSNIPSCB macro.

System action: Utility processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

00E4010B • 00E4010C

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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E4010B

Explanation: DB2 failed during execution of the DSNIPZOP macro.

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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E4010C

Explanation: The data manager subcomponent of DB2 failed during execution of the DSNIREPL macro.

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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E4010D

Explanation: The data manager subcomponent of DB2 failed during execution of the DSNISETH macro.

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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E4010E

Explanation: The data manager subcomponent of DB2 failed during execution of the DSNISRCF macro.

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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E4010F

Explanation: The data manager subcomponent of DB2 failed during execution of the DSNIURBA macro.

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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00E40110 • 00E40112

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40110

Explanation: The data space manager subcomponent of DB2 failed during execution of the reset of an index space or table space page set.

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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.

- UTPRINT output, produced by utility invocation of SORT.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40111

Explanation: The data space manager subcomponent of DB2 failed during execution of the DSNPXTND macro.

System action: The utility job is abended. DSM provides diagnostic information.

System programmer response: Determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40112

Explanation: DSNUGMAP, a utilities program, failed.

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. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40113

Explanation: The data space manager subcomponent of DB2 failed during execution of the reset of an index space or table space page set.

System action: The utility job is abnormally terminated. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

System programmer response: If the condition identified cannot be corrected, determine the failing environment. If you suspect an error in DB2, refer to Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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.

Problem determination: See message DSNT500I in this manual for a 'resource unavailable' condition.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.

- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40114

Explanation: DB2 failed during execution of DSNICLPS.

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. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40115

Explanation: The data manager subcomponent of DB2 failed during execution of DSNIUSTP.

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. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:

- 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.

- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40116

Explanation: Either DSN3SYNC or DSN3ABRT failed.

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. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40117

Explanation: DSNURBXB, a utilities module, failed.

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. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40118

Explanation: The data space manager subcomponent of DB2 failed during execution of the DSNPGNPO macro.

System action: The utility job is abended. The DSM provides any required diagnostic information, such as messages, dumps, or log records.

System programmer response: Determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

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.

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

Part 2 of *Utility 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.

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 Part 2 of *Utility Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Make sure the SYSLGRNX table space is not empty before applying the log.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- Listings of SYSIBM.SYSCOPY and either SYSIBM.SYSLGRNX, SYSLGRNG, or both.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.

00E4011B

Explanation: The data manager subcomponent of DB2 failed during the execution of DSNIHDFM or DSNIHIFM.

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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E4011C

Explanation: The log manager subcomponent of DB2 failed during execution of the DSNJLGR macro.

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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Listing of DB2 log output.
- Contents of the BSDS (both copies if dual BSDS in use) obtained by using the DB2 print log map (DSNJU004) utility.
- 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.
- DB2 log output, including any DB2 recovery log archive tapes.
- Listings of SYSIBM.SYSCOPY and either SYSIBM.SYSLGRNX, SYSLGRNG, or both.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E4011D

Explanation: DB2 detected an error during execution of the DSNIDDRN macro. 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.

System programmer response: Determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- Detailed description of events immediately prior to and during the abend.
- 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.
- REPAIR dump of all SYSUTIL pages.
- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period from the last IPL to the time of the failure.

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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E40120

Explanation: A delete of SYSLGRNX information failed during -TERM UTILITY command processing for a REORG utility in the RELOAD phase.

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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40121

Explanation: A RDJFCB macro invocation returned a nonzero return code.

System action: Processing is abended.

System programmer response: Determine the failing environment. If you suspect an error in DB2, refer to Part 2 of *Utility Guide and Reference* for information on identifying and reporting the problem.

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.

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.

System action: Processing is abnormally terminated.

Operator response: Notify the system programmer.

System programmer response: Determine the failing environment. If you suspect an error in DB2, refer to Part 2 of *Utility Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:
* 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.
* Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
* SYSABEND, SYSUDUMP, or SYSMDUMP output.
* Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
* 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.
* UTPRINT output, produced by utility invocation of SORT.

User response: Notify the system programmer.

00E40123

Explanation: The RECOVER TABLESPACE utility cannot access the SYSIBM.SYSVOLUMES catalog table to process a concurrent copy produced by the DFDSS 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:
* 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.

* Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
* Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E40124

Explanation: A down level internal control block was detected.

System action: The utility job step that requested the function is abended. The abend is accompanied by message DSNU424I.

System programmer response: Refer to the APAR mentioned in message DSNU424I.

User response: Refer to the APAR mentioned in message DSNU424I.

Problem determination: Refer to the APAR mentioned in message DSNU424I.

00E40125

Explanation: The RECOVER utility was recovering an index space 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.

System programmer response: Determine the failing environment. Refer to Section 3 of Diagnosis Guide and Reference for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:
* 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.
* Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
* 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.
* UTPRINT output, produced by utility invocation of SORT.
* Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
* SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40126

Explanation: The RECOVER utility was recovering an index space with index versioning active. The utility issued the DSNDIDPB 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.

System programmer response: Determine the failing environment. Refer to Section 3 of Diagnosis Guide and Reference for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40163

Explanation: An error was detected during activity history recording insert of SYSIBM.SYSLGRNG or SYSLGRNX.

System action: Processing is abended.

System programmer response: Determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40164

Explanation: An error was detected during activity history recording update of SYSIBM.SYSLGRNG or SYSLGRNX.

System action: Processing is abended.

System programmer response: Determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40165

Explanation: An error was detected during an execution unit switch while performing application history recording or drop processing.

System action: Processing is abended.

System programmer response: Determine the failing environment. Refer to part 2 of *Diagnosis Guide and*

Reference for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40166

Explanation: A delete of SYSIBM.SYSLGRNX information failed during DROP processing.

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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40167

Explanation: A delete of SYSIBM.SYSCOPY information failed during DROP processing.

System action: Processing is abended.

System programmer response: Determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40168

Explanation: The buffer manager (BM) subcomponent of DB2 failed during the execution of the DSNBPFPP macro.

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. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is a DB2 subsystem internal error.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

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.

System programmer response: Determine the failing environment. Refer to Section 3 of Diagnosis Guide and Reference for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.

- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40189

Explanation: An error was detected while inserting records from SYSIBM.SYSCOPY.

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 part 2 of *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.

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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00E40191

Explanation: An error was detected while deleting records from SYSIBM.SYSCOPY.

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 part 2 of *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.

System action: Utility processing is abended.

System programmer response: Determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

00E40193

Explanation: An error was detected while a utility was attempting to retrieve catalog table information. This is an internal error.

System action: The utility job is abended. A SYSABEND dump of batch storage and an SVC dump of the database services storage are requested.

System programmer response: Determine the failing environment.

User response: Notify the system programmer.

Problem determination: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:
- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

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.

System programmer response: Determine the failing environment.

User response: Notify the system programmer.

Problem determination: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:
- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.

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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.

System programmer response: Determine the failing environment.

User response: Notify the system programmer.

Problem determination: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00E40196 • 00E40201

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.

00E40196

Explanation: DB2 detected an error while reading the catalog history tables.

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 that is 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 here, it is an internal IBM code.

Problem determination: If the condition cannot be corrected, determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.

00E40197

Explanation: DB2 detected an error while deleting rows from the catalog history table.

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 that is 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 here, it is an internal IBM code.

Problem determination: If the condition cannot be corrected, determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.

00E40201

Explanation: RUNSTATS was unable to reposition and continue processing after a COMMIT.

System action: Utility processing is abended.

System programmer response: Determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: Collect the following diagnostic items:

- 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.

- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40202

Explanation: An error was detected while scanning a table space or index during RUNSTATS processing.

System action: Utilities processing is abended.

System programmer response: If message DSNT500I was issued, refer to the description of the message in *Messages* , otherwise, this is an internal error. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: If message DSNT500I was issued, assure that the indicated resource is available and resubmit the job, otherwise notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:
- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40203

Explanation: An error was detected in a parameter list passed to the RUNSTATS message-formatting routine.

System action: Utilities processing is abended.

System programmer response: Determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:
- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

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00E40204

Explanation: An error was detected while attempting to locate the PB0 control block for a table space partition.

System action: Utilities processing is abended.

System programmer response: Determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:
- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

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00E40205

Explanation: An error was returned from COMMIT or ABORT processing during RUNSTATS.

System action: Utilities processing is abended.

System programmer response: Determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:
- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40206

Explanation: DB2 detected an error while updating the statistics in the SYSIBM.SYSCOLUMNS or SYSIBM.SYSCOLUMNS_HIST catalog table.

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 that is 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 here, it is an internal IBM code.

Problem determination: If the condition cannot be corrected, determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:
- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.

00E40207

Explanation: DB2 detected an error while updating the statistics in the SYSIBM.SYSINDEXES or SYSIBM.SYSINDEXES_HIST Catalog table.

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 that is 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 here, it is an internal IBM code.

Problem determination: If the condition cannot be corrected, determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:
- 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.

- SVC dump (or system dump), taken to
  SYS1.DUMPxx data set, as result of an
  operator-initiated dump command or SLIP trap exit.
- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- Listing of SYS1.LOGREC data set, obtained by
  executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of
  SORT.

00E40208

Explanation: DB2 detected an error while updating
the statistics in the SYSIBM.SYSINDEXPART or
SYSIBM.SYSINDEXPART_HIST Catalog table.

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 that is 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
part 2 of *Diagnosis Guide and Reference* for information
on identifying and reporting the problem.

Collect the following diagnostic items:
- 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.
- SVC dump (or system dump), taken to
  SYS1.DUMPxx data set, as result of an
  operator-initiated dump command or SLIP trap exit.
- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- Listing of SYS1.LOGREC data set, obtained by
  executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of
  SORT.

00E40209

Explanation: DB2 detected an error while updating
the statistics in the SYSIBM.SYSTABLEPART or
SYSIBM.SYSTABLEPART_HIST Catalog table.

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 that is 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 here, it is an internal IBM
code.

Problem determination: If the condition cannot be
corrected, determine the failing environment. Refer to
part 2 of *Diagnosis Guide and Reference* for information
on identifying and reporting the problem.

Collect the following diagnostic items:
- 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.
- SVC dump (or system dump), taken to
  SYS1.DUMPxx data set, as result of an
  operator-initiated dump command or SLIP trap exit.
- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- Listing of SYS1.LOGREC data set, obtained by
  executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of
  SORT.

00E40210

Explanation: DB2 detected an error while updating
the statistics in the SYSIBM.SYSTABLES or
SYSIBM.SYSTABLES_HIST Catalog table.

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 that is 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

00E40211 • 00E40212

code is not documented here, it is an internal IBM code.

Problem determination: If the condition cannot be corrected, determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.

00E40211

Explanation: An error was detected while updating the statistics in the SYSIBM.SYSTABLESPACE Catalog table.

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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- SYSABEND, SYSUDUMP, or SYSMDUMP output.

- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.

00E40212

Explanation: A 'resource unavailable' condition was detected while attempting to access a catalog table during RUNSTATS processing.

System action: Utility processing is abended. The abend will be accompanied by message DSNT500I. An SDUMP might be taken.

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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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.

Problem determination: Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40213

Explanation: DB2 detected an error while updating the statistics in the SYSIBM.SYSCOLDIST or SYSIBM.SYSCOLDIST_HIST catalog table.

System action: Utilities processing is abended. Message DSNT500I might accompany this abend. An SDUMP might be taken.

System programmer response: If the condition identified cannot be corrected, determine the failing environment. If you suspect an error in DB2, Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Correct the 'resource unavailable' condition that is 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 here, it is an internal IBM code. Notify the system programmer.

Problem determination: Collect the following diagnostic items:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.

00E40214

Explanation: DB2 detected an error while updating the statistics in the SYSIBM.SYSTABSTATS or SYSIBM.SYSTABSTATS_HIST catalog table.

System action: Utilities processing is abended. Message DSNT500I might accompany this abend. An SDUMP might be taken.

System programmer response: If the condition identified cannot be corrected, determine the failing environment. If you suspect an error in DB2, Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Correct the 'resource unavailable'

condition that is 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 here, it is an internal IBM code. Notify the system programmer.

Problem determination: Collect the following diagnostic items:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.

00E40215

Explanation: DB2 detected an error while updating the statistics in the SYSIBM.SYSINDEXSTATS or SYSIBM.SYSINDEXSTATS_HIST catalog table.

System action: Utilities processing is abended. Message DSNT500I might accompany this abend. An SDUMP might be taken.

System programmer response: If the condition identified cannot be corrected, determine the failing environment. If you suspect an error in DB2, Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Correct the 'resource unavailable' condition that is 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 here, it is an internal IBM code. Notify the system programmer.

Problem determination: Collect the following diagnostic items:

- 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.

- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.

00E40216

Explanation: An error was detected while updating the statistics in the SYSIBM.SYSCOLSTATS catalog table.

System action: Utilities processing is abended. Message DSNT500I might accompany this abend. An SDUMP might be taken.

System programmer response: If the condition identified cannot be corrected, determine the failing environment. If you suspect an error in DB2, Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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.

Problem determination: Collect the following diagnostic items:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.

00E40217

Explanation: An error was detected while updating the statistics in the SYSIBM.SYSCOLDISTSTATS catalog table.

System action: Utilities processing is abended. Message DSNT500I might accompany this abend. An SDUMP might be taken.

System programmer response: If the condition identified cannot be corrected, determine the failing environment. If you suspect an error in DB2, Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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.

Problem determination: Collect the following diagnostic items:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.

00E40218

Explanation: DB2 detected an error while updating the statistics in the SYSIBM.SYSLOBSTATS or SYSIBM.SYSLOBSTATS_HIST Catalog table.

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 that is 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 here, it is an internal IBM code.

Problem determination: If the condition cannot be corrected, determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.

00E40220

Explanation: An error was detected while accessing the SYSIBM.SYSSTOGROUP catalog table during STOSPACE processing.

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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40221

Explanation: An error was detected while accessing the SYSIBM.SYSTABLEPART catalog table.

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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40222

Explanation: An error was detected while accessing the SYSIBM.SYSINDEXPART catalog table during STOSPACE processing.

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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:
- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40223

Explanation: An error was detected while accessing the SYSIBM.SYSTABLESPACE catalog table.

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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:
- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40224

Explanation: An error was detected while accessing the SYSIBM.SYSINDEXES catalog table during STOSPACE processing.

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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:
- 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.

- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

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00E40225

Explanation: An error has been detected by DSNPSCAT during STOSPACE processing.

System action: Utilities processing is abended.

System programmer response: Determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40226

Explanation: An error occurred while updating the statistics in the SYSIBM.SKSKEYTARGETSTATS catalog table.

System action: Utilities processing is abended.

Message DSNT500I might accompany this abend. An SDUMP might be taken.

System programmer response: Determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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.

Problem determination: This is an internal error.

Collect the following diagnostic items:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.

00E40227

Explanation: An error was detected while updating the statistics in the SYSIBM.SYSKEYTARGETS or SYSIBM.SYSKEYTARGETS_HIST catalog table.

System action: Utilities processing is abended. Message DSNT500I might accompany this abend. An SDUMP might be taken.

System programmer response: Determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Correct the resource unavailable condition that is 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.

Problem determination: Collect the following diagnostic items:

- 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.

| • SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.

| • SYSABEND, SYSUDUMP, or SYSMDUMP output.

| • Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

| • 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.

| • UTPRINT output, produced by utility invocation of SORT.

| **00E40228**

| **Explanation:** An error was detected while updating the statistics in the SYSIBM.SYSKEYTGTDISTSTATS catalog table.

| **System action:** Utilities processing is abended. Message DSNT500I might accompany this abend. An SDUMP might be taken.

| **System programmer response:** If the condition identified cannot be corrected, determine the failing environment. If you suspect an error in DB2, Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

| **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.

| **Problem determination:** Collect the following diagnostic items:

| • 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.

| • SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.

| • SYSABEND, SYSUDUMP, or SYSMDUMP output.

| • Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

| • 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.

| • UTPRINT output, produced by utility invocation of SORT.

| **00E40229**

| **Explanation:** An error was detected while updating the statistics in the SYSIBM.SYSKEYTGTDIST or SYSIBM.SYSKEYTGTDIST_HIST catalog table.

| **System action:** Utilities processing is abended. Message DSNT500I might accompany this abend. An SDUMP might be taken.

| **System programmer response:** If the condition identified cannot be corrected, determine the failing environment. If you suspect an error in DB2, Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

| **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.

| **Problem determination:** Collect the following diagnostic items:

| • 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.

| • SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.

| • SYSABEND, SYSUDUMP, or SYSMDUMP output.

| • Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

| • 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.

| • UTPRINT output, produced by utility invocation of SORT.

00E40300

Explanation: An error occurred in END INDEX LOAD processing following a sequence of index entry loads.

System action: The utility job is abended. A SYSABEND dump of batch storage is requested.

System programmer response: Determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:

• 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.

- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

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.

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:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E40302

Explanation: An error occurred while attempting to force a page set closed.

System action: The utility job is abended. A SYSABEND dump of batch storage is requested.

System programmer response: Determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:

- 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.

- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40303

Explanation: An attempt was made to access the SYSIBM.SYSINDEXES catalog table to retrieve the NAME, CREATOR, TBNAME and TBCREATOR columns. An error was returned from the DSNXKACC protocol used to access SYSIBM.SYSINDEXES.

System action: The utility job is abended. Unless a 'resource unavailable' condition was indicated, a SYSABEND dump of batch storage is requested.

System programmer response: Determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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.

Problem determination: This might be an internal error.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40304

Explanation: An error occurred during key/RID pair delete processing for a nonclustering index.

System action: The utility job is abended. A SYSABEND dump of batch storage is requested.

System programmer response: Determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E40305

Explanation: An error occurred during the reset of an index space or table space page set or page set partition.

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.

System programmer response: If the condition identified cannot be corrected, determine the failing environment, and if you suspect an error in DB2, refer to Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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.

Problem determination: See message DSNT500I in

this manual. See the secondary reason code from register 2.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40306

Explanation: An error occurred during a locate or create PSCB for a table space or index space page set.

System action: The utility job is abended. A SYSABEND dump of batch storage is requested.

System programmer response: Determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40307

Explanation: An error occurred during the creation of a dynamic cursor block (CUB) for a table space or index space page set.

System action: The utility job is abended. A SYSABEND dump of batch storage is requested.

System programmer response: Determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40308

Explanation: An error occurred while attempting to allocate or deallocate storage for the table space record buffer.

System action: The utility job is abended. A SYSABEND dump of batch storage is requested.

System programmer response: Determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40309

Explanation: An error occurred during the construction of an index entry. The error occurred while reading the table space record, while extracting the key from the table space record, or while connecting the entry into the index.

System action: The utility job is abended. A SYSABEND dump of batch storage is requested.

System programmer response: Determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

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.

00E4030B • 00E4030D

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.

System programmer response: Determine the failing environment. If you suspect an error in DB2, refer to Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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 may be recovered by the REBUILD INDEX or RECOVER utility.

Problem determination: If working data set was manipulated by user during restart process, make sure it was handled properly.

Collect the following diagnostic items:

* 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.
* Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
* SYSABEND, SYSUDUMP, or SYSMDUMP output.
* Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
* 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.
* UTPRINT output, produced by utility invocation of SORT.

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. Message DSNU254I was issued earlier to report the records that were processed and the records that were expected. A dump is requested.

System programmer response: Determine the failing environment.If you suspect an error in DB2, refer to Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the System Programmer.

Problem determination: Make sure that the unload data set was handled correctly.

Collect the following diagnostic items: listed in

* 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.
* Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E4030C

Explanation: An internal error occurred while building the dictionary.

System action: The utility is stopped.

Operator response: If necessary, 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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items: listed in

* 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.
* Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
* SYSABEND, SYSUDUMP, or SYSMDUMP output.
* Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
* 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.
* UTPRINT output, produced by utility invocation of SORT.

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 'RBDP' (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.

00E4030E

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.

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 Part 2 of *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 the SYSLOG data set for the
  period of time spanning the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by
  DB2 (04E and 04F abends).
- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- Listing of SYS1.LOGREC data set, obtained by
  executing IFCEREP1.
- 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.

- UTPRINT output, produced by utility invocation of
  SORT.

00E4030F

Explanation: After the last iteration of log processing,
one or more index keys in the shadow copy are not
unique.

REORG with SHRLEVEL CHANGE operates as
follows:

1. Unloads data from the original copy of the area
   (table space or partition) being reorganized
2. Reloads into a shadow copy of that area
3. Iteratively applies the log (which records
   applications' writing of the original copy) to the
   shadow copy so that the shadow copy and the
   original copy contain the same data

If the table space has any unique indexes, those indexes
will enforce uniqueness of the relevant index keys in
the original copy. Those index keys should also be
unique in the shadow copy.

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 Part 2 of *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 the SYSLOG data set for the
  period of time spanning the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by
  DB2 (04E and 04F abends).
- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- Listing of SYS1.LOGREC data set, obtained by
  executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of
  SORT.

00E40310

Explanation: An error occurred during the restart of a
LOAD or REORG utility execution. An appropriate
error message is issued.

System action: The utility is abended.

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:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40311

Explanation: Commit processing failed because of one of the following reasons:

- One of the resource managers voted NO.
- The service controller (SC) subcomponent responded NO on a prepare-to-commit notification.

System action: Utility processing is abended.

System programmer response: Determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: The problem might be due to a communication error. In the utility job output, refer to the corresponding DSNU016I or DSNU017I message for the CAUSE=X'cccccccc' in *Messages* .

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.

- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

Related reference

↪ SYSIBM.SYSCOPY table (DB2 SQL)

00E40312

Explanation: An error occurred during abort processing.

System action: The utility is abended. A SYSABEND dump of batch storage is requested.

System programmer response: Determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40313

Explanation: An error occurred while the first or next key entry was being retrieved from an index.

System action: The utility job is abended. A SYSABEND dump of batch storage is requested.

System programmer response: Determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40314

Explanation: An error occurred while repositioning the cursor block (CUB) to the last index entry that was retrieved.

System action: The utility job is abended. A SYSABEND dump of batch storage is requested.

System programmer response: Determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

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.

System action: The utility job is abended. A SYSABEND dump of batch storage is requested.

System programmer response: Determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40316

Explanation: An error occurred while the first or next record entry was being retrieved from a table space.

System action: The utility job is abended. A SYSABEND dump of batch storage is requested.

System programmer response: Determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40317

Explanation: An object descriptor block (OBD) could not be found for the OBID associated with the object descriptor.

System action: The utility job is abended. A SYSABEND dump of batch storage is requested.

System programmer response: Determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

The name of the CSECT involved is given in VRARRK5. The full CSECT name given in the dump title.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40318

Explanation: An error occurred while preparing for or ending a series of data record loads or while attempting a data record load.

One possible cause for this error is that the primary space allocation for the shadow data set is too small.

System action: The utility job is abended.

System programmer response: Determine the failing environment. If you suspect an error in DB2, refer to Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40319

Explanation: An error occurred while retrieving information from the SYSIBM.SYSTABLES catalog table.

System action: The utility job is abended. A SYSABEND dump of batch storage is requested.

System programmer response: Determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

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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.

System action: The utility job is abended. An SDUMP of the ssnmDBM1 address space is requested.

System programmer response: Determine the failing environment. Refer to Section 3 of Diagnosis Guide and Reference for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- Definitions of table spaces, tables, and indexes involved in the error.
- REPAIR dump of all SYSUTIL pages.
- Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period from the last IPL to the time of the failure.
- DSN1COPY-generated copy of the table and index, taken before any recovery is performed.
- Definitions of table spaces, tables, and indexes involved in the error. The object identifiers (OBIDs)

identified with each table in the table space with the error can be obtained from SYSIBM.SYSTABLES.
- Copy of the log for this period, so that additional DSN1LOGP reports can be produced for problem determination.
- Printed contents of the SYSIBM.IPNAMES table.
- Printed contents of the SYSIBM.IPLIST table.

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.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.

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.

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.

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.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.

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.

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.

System programmer response: This is an internal

error. Determine the failing environment. If you suspect an error in DB2, refer to Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: If this condition arises during renaming 1, 2, or 3, and 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.

Problem determination: Collect the following diagnostic items:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- IDCAMS LISTCAT output for the ICF (VSAM) catalog that contains the DB2 subsystem catalog that defined the failing index or table.
- VTOC listing of the disk volume on which the failing operation occurred.
- 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.

00E40320

Explanation: A failure occurred while attempting to restart the RELOAD phase of the LOAD or REORG utility.

System action: The utility job is abended. A SYSABEND dump of batch storage is requested.

System programmer response: Determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40321

Explanation: An error occurred while retrieving information from the SYSIBM.SYSCOLUMNS catalog table.

System action: The utility job is abended. A SYSABEND dump of batch storage is requested.

System programmer response: Determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40322

Explanation: An error occurred while attempting to add an entry to an index.

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.

System programmer response: Determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

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.

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 Part 2 of *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.

System action: The utility job is abended. A SYSABEND dump of batch storage and an SVC dump of the database services storage are requested.

System programmer response: Determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40325

Explanation: An error occurred during the construction of an index. The error occurred while loading the index entries into the index page set.

System action: The utility job is abended. A SYSABEND dump of batch storage and an SVC dump of the database services storage are requested.

System programmer response: Determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40326

Explanation: An error occurred during the construction of an index. The error occurred during sort.

System action: The utility job is abended. A SYSABEND dump of batch storage and an SVC dump of the database services storage are requested.

System programmer response: Determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40333

Explanation: An error occurred while attempting a forced write of RELOAD phase data buffers.

System action: RELOAD phase processing is

terminated. An SDUMP of the *ssnm*DBM1 address space is requested.

System programmer response: Determine the failing environment. If you suspect an error in DB2, refer to Part 2 of *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.

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.

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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: If this abend is due to an unavailable resource, message DSNT500I provides sufficient problem determination and correction information. Register 2 contains a secondary reason code that might provide additional information.

00E40335

Explanation: An error has been detected while attempting to read a row from the SYSIBM.SYSRELS table.

System action: The utility job is abended.

System programmer response: Determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:
- 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.
- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.

- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

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.

System action: Utility processing is abended. An SDUMP is requested.

User response: Notify the system programmer.

Problem determination: This is an internal error. Refer to part 2 of *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.

System action: The utility job is abended. An SDUMP of the *ssnm*DBM1 address space is requested.

System programmer response: Determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:
- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.
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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 *ssnm*DBM1 address space is requested.

System programmer response: Determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

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 *ssnm*DBM1 address space is requested.

System programmer response: Determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

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00E40345

Explanation: The subtask performing an MVS sort terminated abnormally.

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.

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).

User response: Determine the cause of the error. If the error can be corrected, the utility can be restarted from the beginning of the reload 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.

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 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:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.

- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

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.

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).

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.

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:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.

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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.

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).

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.

Problem determination: Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.

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00E40350

Explanation: An error has been returned from LOB MANAGER insert or retrieve.

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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).

| • SYSABEND, SYSUDUMP, or SYSMDUMP output.
| • Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
| • 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.
| • UTPRINT output, produced by utility invocation of SORT.

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 in the LOB table space that are not associated with a row in the base table.

00E40353

Explanation: An error was detected while reorganizing a LOB table space.

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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.

| ## 00E40355

| **Explanation:** An error was detected while unloading or reorganizing a table space. A seclabel column was found to be in error.

| **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:** Collect the following diagnostic items:

| • 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.
| • Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
| • 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.
| • UTPRINT output, produced by utility invocation of SORT.
| • Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
| • SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

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| ## 00E40356

| **Explanation:** The LOAD utility used the DSNXVNUM protocol to invoke a conversion routine for decimal floating-point data type. An error was returned that indicates an environmental error.

| **System action:** The utility job is abended. An SDUMP of the ssnmDBM1 address space is requested.

| **System programmer response:** Determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

| **User response:** Notify the system programmer.

| **Problem determination:** If the reason code is 24 ('18'X), then the failure is caused by an incorrect Language Environment (LE) system error.

| Collect the following diagnostic items:

| • 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.
| • 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40401

Explanation: An error has been detected while scanning for a specified key in REPAIR by KEY processing.

System action: Utilities processing is abended.

System programmer response: Determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:
- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40403

Explanation: An error has been detected while scanning for the requested RECORD during REPAIR by record processing.

System action: Utilities processing is abended.

System programmer response: Determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:
- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40404

Explanation: An error has been returned from the get-page function, DSNBGETP.

System action: Utilities processing is abended.

System programmer response: Determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:
- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40405

Explanation: An error has been returned from the open-piece function, DSNBOPPP.

System action: Utilities processing is abended.

System programmer response: Determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40406

Explanation: An error has been returned from the replace-page function, DSNBRELP.

System action: Utilities processing is abended.

System programmer response: Determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.

- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40410

Explanation: The data manager protocol DSNISETR returned an error.

System action: Utilities processing is abended.

System programmer response: Determine the failing environment. Refer to part 2 of *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 or DSNODELL protocol during REPAIR DELETE processing.

System action: Utilities processing is abended.

System programmer response: Determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

00E40413

Explanation: An error has been detected by the REPAIR utility. Specifically, the DSNINOTC protocol has returned an error.

System action: The utility job step is placed in the stopped state.

Problem determination: This abend code may be accompanied by a DSNT500 error message that may indicate a correctable problem. If the DSNT500 message has not been issued or if the problem can not be corrected, collect the following diagnostic items listed in

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.

- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40414

Explanation: An error was detected while trying to determine the highest member ID in the data sharing environment. This is an internal error.

System action: Utilities processing is abended.

System programmer response: Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00E40415

Explanation: An error was detected while trying to determine the member name for the data sharing member ID. This is an internal error.

System action: Utilities processing is abended.

System programmer response: Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00E40500

Explanation: An error was returned by the reset function, DSNPRSPS or DSNPREST.

System action: Utilities processing is abended.

System programmer response: Determine the failing environment. If you suspect an error in DB2, refer to Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

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:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.

- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40600

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.

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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: SYSOUT might contain the record being processed at the time of abnormal termination.

The following general purpose registers (GPRs) contain the indicated diagnostic information:

GPR	Content
2	Address of the error message
5	Address of the load table

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40601

Explanation: There was a utility abend in the DB2 database services address space (*ssnm*DBM1).

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.

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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

If this reason code is issued as the result of running the CATMAINT job during a migration effort, and it is accompanied by SQL code -601, perform the following steps:

1. Terminate the CATMAINT job.
2. Fall back to the previous version of DB2 for z/OS.
3. Drop the object name that is identified by SQL code -601.
4. Redefine the object name that is identified by SQL code -601 with IDCAMS.
5. Update to the version of DB2 for z/OS that you are migrating to.
6. Run the CATMAINT job again.

Problem determination: The following general purpose registers (GPRs) contain the indicated diagnostic information:

GPR	Content
2	Address of the error message
7	Address of CT

Check the utility job output for detailed error messages and resolve them.

Collect the following diagnostic items:

* 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.
* SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
* Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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.

00E40702

Explanation: An error has been detected by CHECK DATA utility during table scanning processing. The data manager protocol DSNISRCF has returned an error.

System action: Utility processing is abended.

System programmer response: Determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:

* 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.
* Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E40703

Explanation: An error has been detected by CHECK DATA utility during table scanning processing. The data manager protocol DSNINXTR has returned an error.

System action: Utility processing is abended.

System programmer response: Determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:

* 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.
* Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E40704

Explanation: The CHECK DATA utility detected an error during table scanning processing or delete processing. The data manager protocol DSNISETR returned an error.

System action: Utility processing abends.

System programmer response: Determine the failing environment. Refer to part 2 of *Diagnosis Guide and*

Reference for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E40705

Explanation: The data manager protocol DSNIEXTK returned an error.

System action: Utility processing abends.

System programmer response: Determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E40706

Explanation: The CHECK DATA utility detected an error while processing primary keys matching. The data manager protocol DSNKSET returned an error.

System action: Utility processing abended.

System programmer response: Determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E40707

Explanation: The CHECK DATA utility detected an error while processing primary keys matching. The data manager protocol DSNKNEX returned an error.

System action: Utility processing abended.

System programmer response: Determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E40708

Explanation: The CHECK DATA utility detected an error while positioning records for cascade delete processing. The data manager protocol DSNISETD returned an error.

System action: Utility processing abended.

System programmer response: Determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

System action: Utilities processing is abended.

Operator response: Notify the system programmer.

System programmer response: If the condition identified cannot be corrected, determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Correct the error condition identified by the DSNT500I message, terminate the utility and restart it from the beginning.

Problem determination: This is an internal error.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E4070A

Explanation: The CHECK DATA utility detected an error during insert records processing. The data manager protocol DSNISRT returned an error.

System action: Utility processing abended.

System programmer response: Determine the failing environment. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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.

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:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E4070D

Explanation: An error was detected while attempting to update the EPOCH column of SYSIBM.SYSTABLEPART table.

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 Appendix F, "Resource types," on page 883 in 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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

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.

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).

00E40800

Explanation: When the utility performs dynamic allocation of sort data sets, the total number of data sets in each sort group must be less than 255. This reason code might be issued after message DSNU3341I.

System action: Utility processing abends.

System programmer response: Provide more disk space for sort work data sets by either adding volumes to the sort pool or by defragmenting the existing sort volumes. Then resubmit the job.

Problem determination: Sort work data sets are allocated in primary quantities only, so this error occurs

when the sort volumes are very fragmented or are used to their full capacity.

Verify the number of free tracks and the size of the largest contiguous block of tracks on your sort volumes to see whether more volumes need to be added to the sort pool or if defragmentation is necessary. Defragmentation might be required if many tracks are still available on each volume but the largest contiguous block is very small.

Related information

➡ DSNU3341I (DB2 Messages)

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.

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 Part 2 of *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 TRACEID or message. The instance of that TRACEID 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 nonswappable.

System action: Utility processing is abended.

System programmer response: Determine the environment for the SYSEVENT TRANSWAP failure. If you suspect an error in DB2, refer to Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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.

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:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E40902

Explanation: A bad parameter has been detected for the DIAGNOSE WAIT function.

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 part 2 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:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.

00E40903

Explanation: An error has been detected while creating the service task for the DIAGNOSE WAIT function.

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 part 2 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:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.

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00E40904

Explanation: An error has been detected during the DIAGNOSE WAIT function.

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 part 2 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:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.

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00E40905

Explanation: An error has been detected while deleting the service task for the DIAGNOSE WAIT function.

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 part 2 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:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.

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00E40906

Explanation: An error has been detected while issuing a WTOR message.

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 part 2 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:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.

- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.

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00E40907

Explanation: An error has been detected while attempting to map externals to a specific database descriptor (DBD).

System action: Utilities processing is abended. The abend may be accompanied by message DSNT500I. An SDUMP may be taken.

Operator response: Notify the system programmer.

System programmer response: If the condition identified cannot be corrected, determine the failing environment. Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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.

Problem determination: See message DSNT500I in this manual. Refer to Appendix F, "Resource types," on page 883 in for an explanation of resource type codes.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.

00E40908

Explanation: The utility function is unable to process the data because the data type of the column was altered from DECIMAL(19,0) to BIGINT, but a value in the column is outside the range of BIGINT.

System action: Utilities processing is abended. The utility job is placed in the stopped state.

Programmer response: Alter the column data type back to DECIMAL(19,0) and refer to the ALTER TABLE description in *SQL Reference* on how to properly prepare for changing DECIMAL(19,0) columns to BIGINT.

00E41000

Explanation: An internal error has occurred. A utility general service was called incorrectly.

System action: The utility job step is placed in the stopped state.

Operator response: None

System programmer response: This abend should never occur. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: The general services DSNUGDYN and DSNUGTDS can be bypassed by not using TEMPLATE dynamic allocation.

Problem determination: This is an internal error.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- 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.
- UTPRINT output, produced by utility invocation of SORT.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (for 04E and 04F abends). Availability of this dump is dependent on the failing environment.
- SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent on the failing environment.

00E41002

Explanation: An error occurred during the loading of an XML column.

System action: The utility job is abended. A

00E41002

SYSABEND dump is requested.

User response: Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- 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.

Chapter 19. X'E5......' codes

Reason code identifiers that begin with 00E5 communicate normal and error situations with the agent services manager.

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.

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 Part 2 of *Utility 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.

Register
    Contents

2   Latch class number (1-32).

3   Address of the latch.

4, 5   Latch class name (1 to 8 characters, left-justified).

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.

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. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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.

If the abend is issued from the in-line expansion macros, then the registers are set as follows:

Register
    Contents

2   Latch class number (1-32)

3   Address of the latch

4, 5   Latch class name (1-8 characters, left justified)

If the abend is issued from DSNVXUL0, then the registers are set as follows:

Register
    Contents

2   Latch class number (1-32)

3   Address of the latch

4   Address of the holder of the latch

5   First waiter for the latch

Registers 2-12 of the abending 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 while holding a latch. A record is written to SYS1.LOGREC, and a DB2 SVC dump is requested. Examine SYS1.LOGREC and, if available, the SVC dump to determine the subcomponent and module requesting the latch.

00E50003 • 00E50006

00E50003

Explanation: An execution unit that is requesting a latch already owns that latch. This is a DB2 subsystem error.

System action: The requesting execution unit is abended.

Operator response: Notify the system programmer.

System programmer response: Collect the necessary diagnostic materials. Refer to part 2 of *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:
- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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 ROBCHNA of a ROB points to itself.

System action: The current 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 Part 2 of *Utility 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:
- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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 part 2 of *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:
- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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 be doing both at the same time. This is probably a DB2 subsystem error.

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 Part 2 of *Utility 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:
- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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 be doing both at the same time. This is probably a DB2 subsystem error.

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 Part 2 of *Utility 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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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 part 2 of *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).

- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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 part 2 of *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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 Part 2 of *Utility 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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).

- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

System action: The agent cancel 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 Part 2 of *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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 Part 2 of *Utility 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 DSNVSRR. 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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

System action: If the CSECT that abends is DSNVRSRB, 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 Part 2 of *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 DSNVSRR and by the recovery routine in DSNVSDC0. Register 6 contains the target EB address.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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.

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 *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.

If you suspect an error in DB2, refer to Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem. Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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 Part 2 of *Utility 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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E50032 • 00E50040

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.

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 part 2 of *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 Part 2 of *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:

* 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.
* Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
* Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

System action: The requesting execution unit is abended.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:

* 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.

* Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
* Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E50036

Explanation: A request was made to perform system agent allocation for an agent that had already been allocated.

System action: The requesting execution unit is abended.

Operator response: Notify the system programmer.

System programmer response: Refer to *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. The fullword address at register 6, which points to the EBROB, should have been zero. That address points to the ROBACE which, in turn, points to the ACERAL.

Collect the following diagnostic items:

* 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.
* Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
* Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer, and restart DB2.

System programmer response: Refer to *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 abends. Refer to the appropriate CICS documentation for information about X'04F' and X'04E' abend completion codes.

Collect the following diagnostic items:

* 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.
* Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E50041

Explanation: DB2 subsystem termination was invoked following an unrecoverable error while processing a terminate agent structure request. The FRR (DSNVTFRR) covering module DSNVFACE was unable to recover. This is a subsystem termination reason code.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer, and restart DB2.

System programmer response: Refer to *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 abends. Refer to the appropriate CICS documentation for information about X'04F' and X'04E' abend completion codes.

Collect the following diagnostic items:
* 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.
* Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

System action: The current execution unit is abended.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:
* 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.
* Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
* Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

System action: The requesting execution unit is abended.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:
* 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.
* Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
* Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E50045

Explanation: DB2 subsystem termination was invoked following an unrecoverable error while processing a create allied agent service request at the thread, sign on, or identify level. The FRR (DSNVCFRR) covering module DSNVCRTH was unable to recover. This is a subsystem termination reason code.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer, and restart DB2.

System programmer response: Refer to *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 abends. Refer to the appropriate CICS documentation for information about X'04F' and X'04E' abend completion codes.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E50046

Explanation: DB2 subsystem termination was invoked following an unrecoverable error while processing a create agent structure request. The FRR (DSNVCFRR) covering module DSNVGACE was unable to recover. This is a subsystem termination reason code.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer, and restart DB2.

System programmer response: Refer to *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 abends. Refer to the appropriate CICS documentation for information about about X'04F' and X'04E' abend completion codes.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer, and restart DB2.

System programmer response: Refer to *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 abends.Refer to the appropriate CICS documentation for information about about X'04F' and X'04E' abend completion codes.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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 redispatch functions. This violates the entry protocols for these functions.

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 subsystem 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: Refer to *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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 subsystem 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: Refer to *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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 redispatch functions.

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: Refer to *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Link pack area map (LPAMAP) and nucleus load module map, obtained by executing AMBLIST.

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 redispatch functions. This is a subsystem termination reason code.

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: Refer to *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 abends. Refer to the appropriate CICS documentation for information about about X'04F' and 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.
- Unable to obtain or release the cross-memory lock (CML) of the system services address space either during mainline processing or during functional recovery processing (for example, reason code '00E50051' or '00E50052').
- The invoking resource manager requested the TCTL=YES option of the resume function while executing in TCB mode (for example, reason code '00E50051').

Collect the following diagnostic items:
- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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: Refer to *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 abends. Refer to the appropriate CICS documentation for information about X'04F' and X'04E' abend completion codes.

Collect the following diagnostic items:
- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).

- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Link pack area map (LPAMAP) and nucleus load module map, obtained by executing AMBLIST.

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.

System action: If the CSECT detecting the error is DSNVSR, the error is percolated (passed) to the DB2 SRB recovery task DSNVRCT. Ultimately, DB2 is terminated abnormally.

If the CSECT detecting the error is DSNVSDC0, 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: Refer to *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 FRR DSNVSRR and by the recovery routine in DSNVSDC0. Register 6 contains the address of the invalid EB.

Collect the following diagnostic items:
- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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: Refer to *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 SYS1.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:
- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- CICS trace listing.
- CICS attachment facility MVS SNAP dump.
- CICS transaction dump.
- IMS trace output.
- IMS dependent region, control region dump, or both.

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' abend with this reason code.

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: Refer to *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 contains the indexes for the intended request.

Collect the following diagnostic items:
- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

System action: The execution unit under which RMRQ was requested is abended.

Operator response: Notify the system programmer.

System programmer response: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The recovery routine of the abended resource manager module requested SYS1.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:
- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E50069 • 00E50071

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.

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: Refer to *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.

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.

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: Refer to *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 the service task is abended with a completion code of X'04F', no DB2 SVC dump is taken. Some resource managers have elected to terminate their service tasks with the purge option. Consequently, the abend may or may not be an actual error. At the time of the abend, register 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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E50071

Explanation: This abend reason code is issued following a cancel return from the resume service during an attempt to notify the create service task requester. Because the requester has been terminated, the newly created service task must be terminated.

System action: The service task is abended.

Operator response: Notify the system programmer.

System programmer response: Refer to *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 Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: At the time of the abend, register 6 points to the execution block (EB) assigned to the service task dispatcher. The EBSQH field, in turn, contains a pointer to the service queue header associated with the abending service task. From the SQH, determine the requesting resource manager. Prior SYS1.LOGREC entries may indicate why the requester was terminated.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

System action: The DB2 subsystem is abended.

Operator response: Notify the system programmer, and restart DB2.

System programmer response: Refer to *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

System action: The current 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 part 2 of *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E50074

Explanation: This abend reason code is issued in response to a nonzero return code from ATTACH during an attempt to create a service task.

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: Refer to *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

System action: The requester is abended.

Operator response: Notify the system programmer.

System programmer response: Refer to *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.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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System action: The requester is abended.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:

* 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.
* Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).

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.

System action: The requesting execution unit is abended.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:

* 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.
* Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
* Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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: Refer to *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:

* 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.
* Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
* Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

System action: The requesting execution unit is abended.

Operator response: Notify the system programmer.

System programmer response: Refer to *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: 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 (the execution block, and the ROB, or resource options block) are valid.

Collect the following diagnostic items:

* 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.

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

System action: An SVC dump is requested specifying an abend code of X'04E' and this reason code. The extraneous FRR entries are deleted from the stack. 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 Part 2 of *Utility Guide and Reference* for information on identifying and reporting the problem.

Problem determination: MVS console data is logged and the SVC dump is taken. No record is written to SYS1.LOGREC.

One or more resource manager functions created an FRR which was not deleted. Examine the current FRR stack in the PSA of the active CPU. The only valid stack entries are those established by DB2 and MVS Dump Services and, if DSNVEUS2, an entry established by that module. The format of the FRR stack is provided as data area FRRS in the appropriate MVS debugging guides.

00E50081

Explanation: A TCB execution unit processor determined that the list of active ESTAE exits associated with the TCB contained one or more entries for ESTAEs which should not be active. This check is made at the conclusion of a resource manager function executing under the TCB.

System action: An SVC dump is requested specifying an abend code of X'04E' 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 Part 2 of *Utility Guide and Reference* 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.

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 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.

System action: The requesting execution unit is terminated.

Operator response: Notify the system programmer.

System programmer response: Refer to *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. It may also be helpful to examine the chain of ROBs in the cache. This chain is anchored in the DB2 DSNDVGCA control block.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

System action: The requesting execution unit is terminated.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:
*   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.
*   Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
*   Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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 Part 2 of *Utility 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:
*   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.
*   Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
*   Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

System action: The requesting execution unit is abended.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:
*   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.
*   Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
*   Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer and rerun the application.

Problem determination: At the time of the abend, general register zero contains the return code from IEAMSCHD.

Collect the following diagnostic items:
*   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.
*   Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
*   Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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: Refer to *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:
- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

System action: The abend is passed on to a subsystem support subcomponent (SSS) ESTAE. Probably, DB2 is abended.

Operator response: Notify the system programmer, and restart DB2.

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:
- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

System action: The subsystem abnormally terminates.

Operator response: Notify the system programmer, and restart DB2.

System programmer response: Refer to *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 the appropriate CICS documentation for information about X'04F' and X'04E' abend completion codes.

Collect the following diagnostic items:
- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E50105

Explanation: This in an internal error.

System action: The caller's task is abended.

Operator response: Notify the system programmer.

System programmer response: Refer to *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 the SYSLOG data set for the period of time spanning the failure.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- All dumps created by this failure.

00E50106

Explanation: This in an internal error.

System action: The caller's task is abended.

Operator response: Notify the system programmer.

System programmer response: Refer to *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 the SYSLOG data set for the period of time spanning the failure.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- All dumps created by this failure.

00E50107

Explanation: This in an internal error.

System action: The caller's task is abended.

Operator response: Notify the system programmer.

System programmer response: Refer to *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 the SYSLOG data set for the period of time spanning the failure.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- All dumps created by this failure.

00E50500

Explanation: An MVS LOCAL or CML lock could not be obtained during DB2 subsystem abnormal termination processing.

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: Refer to *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:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E50501

Explanation: An MVS local or CML lock could not be released during DB2 subsystem abnormal termination processing.

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: Refer to *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:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E50502

Explanation: An MVS LOCAL lock could not be obtained during DB2 subsystem abnormal termination processing.

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: Refer to *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:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E50503

Explanation: An MVS LOCAL lock could not be released during DB2 subsystem abnormal termination processing.

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: Refer to *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:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

System action: Recording of the error encountered during subsystem termination continues.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *Utility Guide and Reference* for information on identifying and reporting the problem.

Problem determination: For information about finding the SDWA refer to Part 2 of *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.

System action: Recording of the error encountered during subsystem termination continues.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *Utility 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.

System action: The DB2 subsystem is abended.

Operator response: Notify the system programmer, and restart DB2.

System programmer response: Refer to *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: 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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E50702

Explanation: An error occurred while processing in SRB mode which could not be recovered.

System action: The DB2 subsystem abnormally terminates 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 Part 2 of *Utility 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 the appropriate CICS documentation 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.

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 Part 2 of *Utility 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 the appropriate CICS documentation for information about about X'04F' and X'04E' abend completion codes.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E50704

Explanation: An error occurred in the DB2 Service Task Controller which could not be recovered.

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 Part 2 of *Utility 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 the appropriate CICS documentation 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.

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 Part 2 of *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 Appendix E, "DB2 abend completion codes (X'04E' and X'04F')," on page 881 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.

System action: The subsystem terminates 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 Part 2 of *Utility 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 determination 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 the appropriate CICS documentation 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.

System action: The DB2 subsystem abnormally terminates.

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 *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 DSNVRCT, 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 the appropriate CICS documentation for information about X'04F' and X'04E' abend completion codes.

Collect the following diagnostic items:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E50708

Explanation: An abend occurred while connecting an allied agent to the System Services address space. The connection must complete so that the allied agent can be terminated.

System action: The DB2 subsystem terminates 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

Part 2 of *Utility 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 the appropriate CICS documentation for information about X'04F' and X'04E' abend completion codes.

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.

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 Part 2 of *Utility 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 the appropriate CICS documentation for information about about X'04F' and X'04E' abend completion codes.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

System action: The DB2 subsystem terminates 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 Part 2 of *Utility 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 the appropriate CICS
documentation 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.

System action: The DB2 subsystem terminates 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
Part 2 of *Utility 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 the appropriate CICS
documentation for information about X'04F' and X'04E'
abend completion codes.

00E50712

Explanation: An error occurred in a latch manager
function attempting to terminate the holder of a DB2
latch. The holder's TCB has been set nondispatchable
by MVS and a CALLRTM to terminate this TCB has
failed.

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 for one or more DB2 abends
immediately prior to the subsystem termination. If you
suspect an error in DB2, refer to Part 2 of *Utility Guide
and Reference* for information on identifying and
reporting the problem.

Problem determination: A DB2 dump of the error is
requested and a record entered into SYS1.LOGREC.
Register 3 at time of error contains the latch-holder's
TCB address in the home address space and register 4
contains the return code from CALLRTM. Refer to
Appendix E, "DB2 abend completion codes (X'04E' and
X'04F')," on page 881 for information about X'04E' and
X'04F' abend completion codes.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by
  DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by
  executing IFCEREP1.

00E50713

Explanation: The agent services recovery control task
was entered in the suspend CANCEL exit. Subsystem
termination was requested with this reason code.

System action: The DB2 subsystem abnormally
terminates.

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. It may be necessary to analyze the MVS
SVC dump requested by the subsystem termination
processor. If you suspect an error in DB2, refer to Part 2
of *Utility Guide and Reference* for information on
identifying and reporting the problem.

Problem determination: An MVS SVC dump was
requested by the subsystem termination processor.

Collect the following diagnostic items:

- 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.
- SVC dump (or system dump), taken to
  SYS1.DUMPxx data set, as result of an
  operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by
  executing IFCEREP1.

00E50715

Explanation: Subsystem termination was requested
following an unrecoverable error in a DB2 SRB mode
execution unit.

System action: The SRB-related task was abended as a
result of SRB to TCB percolation. 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
Part 2 of *Utility 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 the appropriate CICS documentation for information about about X'04F' and X'04E' abend completion codes.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E50717

Explanation: The subsystem was terminated, because resource manager ESTAE exits could not be purged for the default service task.

System action: The DB2 subsystem abnormally terminates.

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 Part 2 of *Utility Guide and Reference* for information on identifying and reporting the problem.

Problem determination: If an abend preceded the subsystem termination request, DB2 diagnostic information may be obtained through SYS1.LOGREC and SVC dump materials. Refer to the appropriate CICS documentation for information about X'04F' and X'04E' abend completion codes.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E50719

Explanation: A failure occurred in a service task, the service task controller, or the recovery control task and was not recovered by the ESTAE of the failing task. No SDWA was provided to the ESTAE exit. This is a subsystem termination reason code.

System action: The DB2 subsystem abnormally terminates.

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

Part 2 of *Utility 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 request. Refer to the appropriate CICS documentation for information about X'04F' and X'04E' abend completion codes.

Collect the following diagnostic items:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E50725

Explanation: Subsystem termination was requested because of an unrecoverable error in a DB2 scheduled SRB-mode execution unit.

System action: The SRB-related task DSNVRCT abnormally terminated due to SRB to TCB percolation; therefore the DB2 subsystem abnormally terminates.

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 necessary, analyze the MVS SVC dump requested by subsystem termination. If you suspect an error in DB2, refer to Part 2 of *Utility 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 obtained as a result of abends occurring prior to subsystem termination. Refer to the appropriate CICS documentation for information about X'04F' and X'04E' abend completion codes.

An MVS SVC dump was requested by system termination. To determine the location of the error, examine the RB structure of the failing TCB. Register 1 contains the original SRB abend code.

Collect the following diagnostic items:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E50727

Explanation: A secondary failure occurred during agent services functional recovery processing. This is a subsystem termination reason code.

System action: The DB2 subsystem abnormally terminates.

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 Part 2 of *Utility 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 the appropriate CICS documentation for information about X'04F' and X'04E' abend completion codes.

Collect the following diagnostic items:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

.

00E50730

Explanation: A thread being processed through thread deallocation 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 Part 2 of *Utility 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 the SYSLOG data set for the period of time spanning the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

Chapter 20. X'E6......' codes

Code identifiers that begin with `00E6` communicate normal and error situations with the instrumentation facility. These codes include instrumentation facility abend codes and instrumentation facility interface reason codes.

The following codes are abend codes that are issued by the instrumentation facility:

- 00E60008
- 00E60086
- 00E60087
- 00E60088
- 00E60100 through 00E60199
- 00E60886
- 00E60887
- 00E60888
- 00E60889
- 00E60B01
- 00E60B02
- 00E60B03
- 00E60B04

The remaining X'E6......' codes are reason codes that are issued by the instrumentation facility interface (IFI). These codes are issued with a return code that DB2 places in the IFCARC1 field of the IFI communication area (IFCA). DB2 places the reason code in the IFCARC2 or IFCAGRSN field.

See Appendix B of *Administration Guide* for information about IFI.

00E60B01

Explanation: An installation field procedure wrote beyond the end of the output buffer.

System action: The execution unit requests an SVC dump, and terminates abnormally.

Operator response: Notify the system programmer.

System programmer response: Correct the field procedure. See the Field Procedures in Appendix B of *Administration Guide*

Problem determination: At the time of abend the register contents are:

R2   The first 4 characters of the field procedure name

R3   The second 4 characters of the field procedure name

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.

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, MSG: 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.

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: Examine the field procedure for any errors. If it is not a field procedure error, determine the requirements imposed by the field procedure.

00E60B02

Explanation: Invalid data was returned from the edit procedure. The data is invalid for one or more of these reasons:

- The first byte or the last byte of the input record was modified by the exit.
- The length of the edited data is greater than the maximum allowed for this row, or less than one.
- The exit returned a row that overran the output area.

System action: An execution unit requests an SVC dump. The execution unit then terminates abnormally.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *Utility Guide and Reference* for information on identifying and reporting the problem.

00E60B03

Explanation: An internal inconsistency was detected by DB2 during data propagation processing.

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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E60B04

Explanation: During the retrieval of captured table data in preparation for propagation to IMS, an invalid data type was found. This data type is not supported for propagation from DB2 to IMS. Since the invalid data type cannot be returned to the Data Propagator (DPROP) exit routine, processing is terminated abnormally. This is an internal DB2 error.

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, MERGE, 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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00E60100-00E60199

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 DSN1DMP utility.

System action: The abending agent might be retried or terminated, depending upon the serviceability dump request.

Problem determination: The abend is issued on the occurrence of a specified trace event. A SVC dump is taken to the SUS1.DUMPxx data set. Problem determination methods depend on the condition that IBM service personnel are attempting to trap.

00E60A0A

Explanation: 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.

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 the place of the record. The
length of the record corresponds to the message length.

Programmer response: Examine the field procedure
for the specific return code generated.

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.

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.

00E60A00

Explanation: An outdated 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 description
occurred.

This reason code does not apply to the success or
failure of the IFI request, but rather to the status of the
data in the IFCID 0185 record.

System action: The system returns an IFI record with
this reason code. The 0185 record instance that contains
the reason code has the header portion only, and the
timestamp, log RBA, and operation code fields in the
header contain only zeroes.

This reason code is issued one time only for each table
within each SQL scope.

User response: Either use an SQL DESCRIBE
statement to get the new description, or consider

changing the IMS DataPropagator exit routine to set
WQALCDCD to A or Y.

Related reference

IMS DataPropagator exit routines (IMS
DataPropagator Concepts)

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,
MSG: message_token
```

Unexpected data was returned from field procedure
fieldproc_name and for column *column_name* on table
table_name. For more information see *message_token*.
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.

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.

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.

System action: The function being traced is abended.
The DB2 subsystem remains operational and the
functional recovery of TRACE will retry if possible.

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->ASCB->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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by
  DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by
  executing IFCEREP1.

00E60086

Explanation: An internal logic problem occurred trying to obtain the MVS CML lock.

System action: The request is abended.

Operator response: Notify the system programmer.

System programmer response: Request the SYS1.LOGREC and SVC dump. Refer to part 2 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:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E60087

Explanation: An internal error occurred attempting to free the MVS CML lock.

System action: The request is abended.

Operator response: Notify the system programmer.

System programmer response: Request the SYS1.LOGREC and SVC dump. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This error is an internal error.

Collect the following diagnostic items:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E60088

Explanation: An internal logic problem occurred on a READS request. The event is being traced asynchronously, which is not allowed.

System action: The request is abended.

Operator response: Notify the system programmer.

System programmer response: Request the SYS1.LOGREC and SVC dump. Refer to part 2 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:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

User response: Allocate more storage for the return area, if desired, and reissue the request.

00E60801

Explanation: The command was partially completed, but an internal error was encountered. Check the return area for a message.

User response: Dependent upon the message in the return area.

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.

User response: Allocate more return area storage and reissue the request.

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.

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.

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.

00E60805

Explanation: The request for information resulted in an abend.

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.

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.

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.

00E60807

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.

00E60808

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 reissued. No SDUMP is taken and control is returned to the application program.

00E60809

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.

00E6080A

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 up to the last record that fits.

User response: Allocate more return area storage and reissue the request.

00E6080B

Explanation: On 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.

00E6080C

Explanation: On a READS request for IFCID 316, no data was returned because no statements matched the qualification criteria. This reason code can occur when WQALFLTR = X'02' and no cached statements exceed the threshold specified in WQALFVAL. This reason code can also occur if the dynamic statement cached but no statements have yet been inserted into the cache.

User response: Adjust the qualification criteria and reissue the request.

00E60810

Explanation: A READS request for IFCID 0254 was partially successful. The return area was not large enough to accommodate all 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:

00E60811

Explanation: On a READS request for IFCID 0254, no data was returned because no qualified datasets or group buffer pools were connected.

User response: Ensure that the qualified datasets or group buffer pools are connected, and reissue the request.

00E60812

Explanation: On a READS request for IFCID 0306, log records are returned. The end-of-scope log point has been reached and 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:

00E60813

Explanation: On a READS request for IFCID 0306, 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:

00E60814

Explanation: On a READS request for IFCID 0306, a WQALMODT call was invoked to terminate log position when no position is held in the log.

Problem determination:

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. This reason code is returned in field IFCAGRSN of the IFCA.

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.

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.

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.

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.

User response: Reissue the request with the correct ownership token for the desired OPn destination or obtain the appropriate monitor authority, as needed.

Problem determination: Examine the specified ownership token and the monitor authority of the user.

00E60825

Explanation: Stack storage was not available for copying the output area.

00E60826

Explanation: On a READA request, the destination specified did not match a valid destination.

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.

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 IFI.

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.

00E60829

Explanation: On a READS request, an unexpected return code was received from IRLM.

00E60830

Explanation: An unexpected return code was received on a READS request.

User response: Reissue the request. If the condition persists, contact your IBM support center and tell them the message you are encountering.

00E60831

Explanation: A number of abends have occurred while processing IFI requests resulting in the disabling of all IFI request and MONITOR trace processing.

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.

00E60832

Explanation: The IFCID specified on a READS was not active.

User response: Issue a -START TRACE for monitor class 1.

00E60833

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.

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.

00E60834

Explanation: An unexpected return code was received from log manager macro DSNJOLGR.

User response: Reissue the request. If the problem persists, contact your IBM service representative.

Problem determination: Examine the validity of

00E60835 • 00E60842

WQALLRBA and WQALLNUM fields.

00E60835

Explanation: An unexpected return code was received from Log Manager Macro DSNJLGR.

User response: Reissue the request. If the problem persists, contact your IBM service representative.

Problem determination: Examine the validity of WQALLRBA and WQALLNUM fields.

00E60836

Explanation: An unexpected return code was received from log manager macro DSNJCLGR.

User response: Reissue the request. If the problem persists, contact your IBM service representative.

Problem determination: Examine the validity of WQALLRBA and WQALLNUM fields.

00E60837

Explanation: On an IFI READS request for IFCID 1 or 2, storage was not available to satisfy the request.

Operator response: Notify the system programmer.

System programmer response: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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.

Problem determination: Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E60838

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. Refer to *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 IFCAGBPN and IFCAR0B.

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:

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.

00E60840

Explanation: An invalid function was specified. The function specified does not match one of the IFI supported functions.

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.

00E60841

Explanation: The IFCA was specified incorrectly. The return code and reason code will be placed at the correct offset in the erroneous IFCA. The IFCA length might be invalid, or the IFCA eye-catcher (IFCAID) might be missing.

User response: Examine the length of the IFCA and the eye-catcher field of the IFCA. Correct any mistakes.

Problem determination: See the return and reason codes placed at the correct offset in the erroneous IFCA.

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'.

User response: Respecify the return area length to conform to the valid range.

00E60843

Explanation: The IFCID area was specified incorrectly. The length might be invalid. The valid range is from X'0006' to X'0044'.

User response: Respecify the IFCID area length field to conform to the valid range.

Problem determination: Examine the length field of the IFCID area.

00E60844

Explanation: The qualification area was specified incorrectly. The length might be invalid, or the WQAL eye-catcher (WQALEYE) might be missing.

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.

00E60845

Explanation: An IFCID specified for a READS or a WRITE request was invalid.

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.

00E60846

Explanation: The output area was specified incorrectly.

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.

00E60847

Explanation: The buffer information area was specified incorrectly.

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.

00E60849

Explanation: The parameters are specified incorrectly on the IFI command request.

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.

00E60850

Explanation: An invalid WQALLTYP value was specified on a READS request.

User response: Correct the invalid WQALLTYP value and reissue the request.

Problem determination: Examine the validity of the WQALLTYP field. It must be 'CI'.

00E60851

Explanation: An invalid WQALLMOD value was specified on a READS request.

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'.

00E60852

Explanation: An invalid WQALLRBA value was specified on a READS request. The starting CI log RBA must end in X'000'.

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'.

00E60853

Explanation: An invalid WQALLNUM value was specified on a READS request. The valid range is X'0001' to X'0007'.

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'.

00E60854

Explanation: The specified WQALLRBA was not in the active log.

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.

00E60855

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.

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.

00E60856

Explanation: No complete CI's are available from the RBA specified in WQALLRBA.

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.

00E60857

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 0000000C 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.

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.

00E60859

Explanation: An IFI 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.

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.

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. Refer to *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.

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.

00E60863

Explanation: On a READS request for IFCID 0306, a resource was unavailable while attempting to read the log.

User response: Reissue the request. Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination:

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. Refer to *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.

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:

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:

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:

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:

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'.

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'.

00E60871

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 can be 00C90064, which means that the decompression dictionary changed since the log record was written.

00E60872

Explanation: On a READS request for IFCID 0306, no data is returned for a WQALMODD call because log position is already held in the log, possibly by a previous WQALMODF or WQALMODN call.

User response: If WQALMODD is desired, make sure that a WQALMODT call has been issued first.

Problem determination:

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:

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.

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.

00E60876

Explanation: The READS request failed because either WQALPLOC, WQALPCOL, or WQALPPNM could not be converted to UTF-8.

User response: Reissue the request. If the problem persists, contact DB2 Support.

00E60886

Explanation: This reason code is used to indicate that an invalid IAMQ function was passed to module DSNWVZXT. This problem should not occur.

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 DSNWZXT. Analyze the dump and previous SYS1.LOGREC entries do isolate the cause of the problem.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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 Part 2 of *Utility Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Normally the standard SYS1.LOGREC 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 Statistics Facility.

00E60888

Explanation: The reason code is set by the Instrumentation Accounting Facility FRR routine when an abend condition occurs during the accounting function. 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.

System action: Depending on the number of errors the Instrumentation Accounting 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 Part 2 of *Utility 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.

00E60889

Explanation: An internal error has occurred on an IFI request. The reason code only appears in the variable recording area (VRA) data of SYS1.LOGREC to indicate the FRR tracking (FRT) area exists in the VRA following the standard DB2 information.

System action: The IFI request abnormally terminates.

Problem determination: The recovery routine for the CSECT that issues this reason code records information in the variable recording area (VRA). If you suspect an error in DB2, refer to Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00E60900

Explanation: This is an informational code. One or more data rows defined with DATA CAPTURE CHANGES might not have been retrieved.

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.

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.

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.

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.

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.

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 Appendix F, "Resource types," on page 883 for an explanation of resource type codes. The reason code is described in *Codes*.

Chapter 21. X'E7......' codes

Reason code identifiers that begin with 00E7 communicate normal and error situations with the relational data system.

00E700A6

Explanation: Failure in DB2 code supporting LE.

System action: The application program abends.

Operator response: Notify the system programmer. Print SYS1.LOGREC.

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.

User response: Notify the system programmer.

Problem determination: Collect the following diagnostic items:

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E700A7

Explanation: LE returned an unexpected return code to DB2.

System action: The application program abends.

Operator response: Notify the system programmer. Print SYS1.LOGREC.

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.

User response: Notify the system programmer.

Problem determination: At the time of abend, register R2 contains two bytes of the function code presented to LE, followed by two bytes of the unexpected return code sent back to DB2 from LE.

Confirm DB2 is running with the correct release of LE with the required service level. Refer to the Program Directory to determine the minimum level of OS/390 and LE and fixes that are required.

Collect the following diagnostic items:

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E70004

Explanation: An inconsistency has been detected in the subsystem catalog tables.

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 Part 3 of *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:

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Dump of page set from DUMP option of REPAIR.

00E70005

Explanation: A relational data system (RDS) subcomponent internal inconsistency was detected.

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 Part 2 of *Utility Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The abend code can be issued by any of the RDS modules. The module name can be found in the SQLCA. SQLERRD1 in the SQLCA contains a unique code that identifies the location within the module where the error was detected.

SQLERRM might contain some meaningful information for this particular error.

Refer to Part 3 of *Diagnosis Guide and Reference* for information about how to find the SQLCA.

Collect the following diagnostic items:

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of the results produced by the SQL statements.

00E70006

Explanation: An internal inconsistency has been reported to the relational data system (RDS) subcomponent by the RDS subcomponent of DB2.

System action: The application program abends.

Operator response: Provide a print of the SVC dump to the system programmer.

System programmer response: Use the information in the 'Problem Determination' section of this message to resolve the problem.

User response: Notify the system programmer.

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 Part 3 of *Diagnosis Guide and Reference* for information about how to find the SQLCA.

Collect the following diagnostic item listed in

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).

00E70007

Explanation: A bad application-supplied address was encountered while trying to copy SQLCA back to the application program.

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:

- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- CICS attachment facility MVS SNAP dump.

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00E70009

Explanation: An invalid value or a return code(EXPLRC1) of 12 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. If EXPLRC1=12, then the Access Control Authorization exit routine is no longer invoked and authorization checking is performed by DB2.

Operator response: Notify the system programmer.

System programmer response: If message DSNX210I has been issued to the System Console, retrieve the return code (EXPLRC1) and reason code (EXPLRC2) from this message and refer to the exit routine's documentation to determine the course of action to be taken.

Refer to *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 or returned a return code (EXPLRC1) of 12. 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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E7000A

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: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E7000C

Explanation: The application program supplied an invalid address.

System action: The application program abends.

Operator response: Notify the user or system programmer.

System programmer response: Assist the user in determining the invalid address.

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 Part 5 of *Application Programming and SQL Guide*.

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 SQLDA length.
	4 (4)	RDIVPARM has the bad address used to locate the SQLDABC.
	5 (5)	RDIVPARM has the bad address used to locate the SQLDA length.

	6 (6)	RDIAUXPA has the bad address used to locate the SQLDA length.
	7 (7)	RDIAUXPA has the bad address used to locate the SQLDABC.
	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 SQLDAID.
	13 (D)	RDIAUXPA has the bad address used to locate the SQLDABC.
	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 precompiler 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:

- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- CICS attachment facility MVS SNAP dump.

Use the following offsets to trace through the control blocks.

PVARS:

Offsets	Len	Description
0 (0)	4	LENGTH OF BLOCK
4 (4)	12	PVENTY, OCCURS ONCE FOR EACH HOST VARIABLE IN THE SQL STATEMENT

PVENTRY:

Offsets	Len	Description
0 (0)	2	COLUMN TYPE
2 (2)	2	COLUMN LENGTH
4 (4)	4	PVDPTR, POINTER TO HOST VARIABLE DATA
8 (8)	4	PVINFO, POINTER TO INDICATOR

FRB:

Offsets	Len	Description
0 (0)	4	BLOCK IDENTIFIER "FRB"
4 (4)	2	RAL ENTRY NUMBER
6 (6)	2	FVL ENTRY NUMBER
8 (8)	4	FRBPARM, POINTER TO PARAMETER LIST (RDIIN)
12 (C)	2	PARAMETER COUNT
14 (E)	2	RETURN CODE
16 (10)	4	REASON CODE
20 (14)	4	FEEDBACK
24 (18)	4	PRH PC LX/EX VALUE
28 (1C)	2	REQUEST QUALIFIER VALUE
30 (1E)	2	RESERVED
32 (20)	0	END OF USER FRB SECTION

RDIIN:

Offsets	Len	Description
0 (0)	2	PARM LIST LENGTH
2 (2)	2	FLAGS
4 (4)	2	CALL TYPE

Offsets	Len	Description
6 (6)	8	PROGRAM NAME
14 (E)	8	TIMESTAMP
22 (16)	2	SECTION #
24 (18)	4	PTR TO ERROR CODE STRUCTURE
28 (1C)	4	RDIVPARM PTR TO USER INPUT VARIABLES (PVARS STRUCTURE)
32 (20)	4	RDIAUXPA PTR TO DB2 RETURN VARIABLES (PVARS STRUCTURE)
36 (24)	2	STATEMENT #
38 (26)	2	STATEMENT TYPE

00E7000F

Explanation: A deadlock condition has been detected.

System action: The requested operation is not performed.

System programmer response: If the deadlock condition becomes chronic, examine the mix of applications running to determine why the deadlock is occurring.

User response: Rerun the application.

Problem determination: The requested operation is not performed. Message DSNT375I is issued and an SQLCODE -904 is issued. For more information, refer to the SQLCODE or to the description of the DSNT375I message.

00E70010

Explanation: A timeout condition has been detected.

System action: The requested operation is not performed.

User response: Rerun the application.

Problem determination: The requested operation is not performed. Message DSNT376I is issued and an SQLCODE -904 is issued. For more information, refer to the SQLCODE 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.

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: If you suspect an error in DB2, refer to Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

See problem determination. If you suspect an error in DB2, refer to Part 2 of *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:
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E70012

Explanation: A user exit has written beyond the end of the output buffer.

System action: The application program abends.

Operator response: Notify the system programmer.

System programmer response: Correct the exit routine. If you suspect an error in DB2, refer to Part 2 of *Utility Guide and Reference* for information on identifying and reporting the problem.

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 DSNXVTMX then DECPTLEN 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 time format to DB2.

00E70013

Explanation: DRDS at the server site supplied an invalid address.

System action: 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.

Collect the following diagnostic items:
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Listing of the results produced by the SQL statements.

00E70014

Explanation: DB2 could not validate the data definition control support tables during startup.

System action: The requested operation is not performed.

Operator response: Notify the system programmer.

System programmer response: Provide a print of the SVC dump to the system programmer. Use the information in the '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
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Listing of the results produced by the SQL statements.

00E70015

Explanation: DB2 was abnormally terminated because the Access Control Authorization exit has indicated that it is unable to process authorization checks and that DB2 should be terminated.

System action: The authorization check task is abended. An SVC dump is requested by DB2 functional recovery. A message is issued to the operator console, and DB2 is terminated.

System programmer response: Use the information in the 'Problem Determination' section of this message to resolve the problem.

Problem determination: Locate operator console message DSNX210I. This message has the return and reason codes from the exit. Since the Access Control Authorization exit (DSNX@XAC) is external to DB2, you will need to refer to its documentation for an explanation of these codes and a resolution to the problem.

00E70016

Explanation: DB2 terminated abnormally because the version of the Access Control Authorization exit routine (DSNX@XAC) is incompatible with this version of DB2.

System action: The access control authorization exit initialization task terminated abnormally. An SVC dump is requested by DB2 functional recovery, message DSNX210I is issued to the operator console and DB2 is terminated.

System programmer response: Install the version of the access control authorization exit routine compatible with this level of DB2 and restart DB2.

Refer to the documentation in the *Administration Guide* for information on the access control authorization exit.

For information on the RACF access control module shipped with DB2, refer to the *DB2 RACF Access Control Module Guide*.

00E70069

Explanation: An installation error was detected while the CICS Attachment Facility was attempting to establish the connection to DB2 for your CICS transaction. This error can be caused by one of the following:

- The current CICS transaction identifier was not found in any of the resource control table (RCT) entries.

- A valid authorization name was not found using the RCT entry for this CICS transaction. The AUTH= parameter in the RCT specifies up to three sources for authorization checking. None of these yielded a valid name for checking. For example, the RACF group might have been specified, but the user was not a member of any RACF group. Or terminal identifier might have been specified, but the transaction was being run without a terminal.

System action: The request is not processed.

System programmer response: Check the RCT table specifications for this transaction to determine if they

are missing or incorrect. If modification is needed, change the RCT source and install the RCT again. Refer to Chapter 2-10, "Connecting the CICS Attachment Facility," of *Administration Guide* for more information.

Problem determination: You might be able to use the DSNC DISPLAY command to check for the existence of an RCT entry for this transaction. If an entry exists, refer to the RCT source. Look at the AUTH= parameter list and determine why CICS was unable to establish a valid authorization name for checking.

00E7006A

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.

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 *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.

System action: The connection is not established.

Operator response: Restart the DB2 subsystem.

User response: Before you can continue, you must restart the DB2 subsystem. Contact the operator to restart the subsystem, and then resubmit your transaction.

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.

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.

00E70082

Explanation: The user has reached the maximum number of outstanding stored procedures or opened cursors for the current thread.

System action: No additional stored procedures may be invoked, and no more cursors are allowed to be opened.

Programmer response: Applications should close cursors as soon as possible, and should issue COMMIT often to allow the stored procedure result set to be cleared.

00E7009A

Explanation: A DECLARE GLOBAL TEMPORARY TABLE statement or OPEN CURSOR (of a scrollable cursor) was issued, but the operation cannot be performed due to one of the following reasons:

- A TEMP database has not been created yet.
- A table space has not been created in the TEMP database yet.
- No table space in the TEMP database has a page size that is large enough for the declared global temporary table.
- A table space in the TEMP database is not available at this time.

System action: The operation is not allowed.

Operator response: Notify the system programmer.

System programmer response: To perform the operation, you must create the required TEMP database or create a table space with a large enough page size.

Problem determination: The requested operation is not performed. An SQLCODE -904 is issued. For more information, refer to Part 1, "SQL codes," on page 1.

00E7009B

Explanation: An invalid operation has been attempted on an incomplete table that was created in a previous release of DB2. The table definition is incomplete due to a missing unique index on a primary key or unique key.

The following DDL operations are not allowed:
- ALTER TABLE
- CREATE INDEX
- DROP INDEX

System action: DB2 does not process the operation.

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 in which the table was created.

Problem determination: DB2 does not perform the requested operation, and issues SQLCODE -904. For more information, refer to Part 1, "SQL codes," on page 1.

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 Part 2 of *Installation Guide*.

Problem determination: The requested operation is not performed. SQLCODE -904 and message DSNT501I are issued. For more information, refer to Part 1, "SQL codes," on page 1. You can also refer to the description of the DSNT501I message in *Messages*.

00E7009D

Explanation: The code level of the DB2 catalog is incompatible with the current code level of:

- A DB2 subsystem that is starting, or
- A datasharing group

System action: DB2 cannot start. Message DSNX208E or DSNX209E is displayed on the system console to describe the problem. An SVC dump is requested for the DSNX208E problem.

Operator response: Notify the system programmer.

System programmer response: Before DB2 can start, each DB2 subsystem must use a level of code that is compatible with the catalog.

Problem determination: DB2 does not start. Message DSNX208 or DSNX209 display a reason code or level information that helps with problem diagnosis.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Contents of the BSDS (both copies if dual BSDS in use) obtained by using the DB2 print log map (DSNJU004) utility.

- Unformatted DSN1PRNT output of the DSNDB01.DBD01 page set. Use the method described in Part 5 of *Diagnosis Guide and Reference* to locate the inconsistent DBD in the DSNDB01.DBD01 page set.

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).

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: Refer to *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E70100

Explanation: This is an internal RDS error. The SQLWARN0 field does not contain a valid value while determining SQLSTATE field value. SQLWARNx fields are described in Appendix D of *SQL Reference*.

System action: The application program ABENDs.

Operator response: Notify the system programmer.

System programmer response: This is a DB2 internal error. Refer to part 2 of *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 the SYSLOG data set for the period of time spanning the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E70105

Explanation: This is an internal RDS error. One of the SQLWARNx fields does not contain a valid value while determining SQLSTATE field value. SQLWARNx fields are described in Appendix D of *SQL Reference*.

System action: The application program ABENDs.

Operator response: Notify the system programmer.

System programmer response: This is a DB2 internal error. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

System action: The reason code or SQLCODE -900 is returned to the application which is in an unconnected state.

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 âⵜⵜProblem Determinationâⵜⵜ section below.

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.

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.

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.

00E70121

Explanation: User ID, password not valid in an IMS or CICS environment. An SQL CONNECT with user ID, password was issued from an IMS or CICS application.

System action: The SQL CONNECT request is not processed. The application is placed in the connectable and unconnected state.

00E70122

Explanation: The user ID or password submitted on a request to CONNECT to the local DB2 exceeded the maximum length supported. The maximum length for each is 8 characters.

System action: The SQL CONNECT request was not processed. The application is placed in the connectable and unconnected state.

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.

System action: The statement cannot be executed. The application is rolled back to the previous COMMIT.

Operator response: Notify the system programmer.

Refer to *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 the SYSLOG data set for the period of time spanning the failure.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E70913

Explanation: The application was the victim in a deadlock or experienced a timeout. RC00E70913 is the same as the SQLCODE -913. For information, refer to the SQL return code.

System action: The statement cannot be executed.

Operator response: Notify the system programmer.

System programmer response: Refer to *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 the SYSLOG data set for the period of time spanning the failure.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E72008

Explanation: The relational data system (RDS) sort subcomponent has determined that there is not enough storage to continue the sort process.

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.

System action: A record is written to SYS1.LOGREC and an SVC dump is requested.

00E72048 • 00E72068

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 part 2 of *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E72048

Explanation: The relational data system (RDS) sort subcomponent has detected an internal inconsistency.

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 part 2 of *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E72058

Explanation: The relational data system (RDS) sort subcomponent has detected an internal inconsistency.

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 part 2 of *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 aggregate 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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E72068

Explanation: The relational data system (RDS) sort subcomponent has detected an internal inconsistency.

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 part 2 of *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: R2 points to the SRTCOMM.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E72078

Explanation: The relational data system (RDS) sort subcomponent has detected an internal inconsistency.

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 part 2 of *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E72088

Explanation: The relational data system (RDS) sort subcomponent has detected an internal inconsistency.

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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The sort subcomponent has detected an error from the Data Manager. 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 of the Data Manager request that failed.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E72098

Explanation: The relational data system (RDS) sort subcomponent has detected an internal inconsistency.

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 part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The sort subcomponent has detected an invalid request for tag sort processing. 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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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 *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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 *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E73001

Explanation: The SQL statement or utility could not be executed because the required level of z/OS is not installed.

System action: For an SQL statement, the statement is rejected with SQLCODE -20101 and this reason code. For a utility, the utility is rejected with message DSNT500I and this reason code.

System programmer response: Refer to the Program Directory to determine the minimum level of z/OS that is required for the syntax used in the statement or utility.

00E73002

Explanation: The SQL statement could not be executed because of a resource unavailable condition. The resource is Language Environment.

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 level/feature of OS/390 that is not installed. DB2 attempted to load a required Language Environment 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, GI10-8182* to determine the minimum level of hardware support that is needed for the syntax used in the statement or utility.

00E73006

Explanation: The SQL statement could not be completed because a functional requisite is not available.

System action: The requested operation is not performed, and SQLCODE -904 is returned with this reason code.

System programmer response: Examine the information returned with SQLCODE -904 to identify the type of resource that is not available.

If ICSF was the unavailable resource, review the DB2 system console for possible DSNX211I messages during DB2 startup for additional problem determination.

Problem determination: Refer to the Program Directory to determine the minimum functional requisite that is needed for the syntax used in the statement.

00E79000

Explanation: DB2 received an SQL CALL statement for a stored procedure. The CALL statement was not accepted because one or more columns of the SYSIBM.SYSROUTINES catalog table for the procedure contains invalid values.

System action: The statement cannot be executed. A DSNX9xx message is displayed on the MVS system console to describe the error that was detected.

Programmer response: Use ALTER PROCEDURE or ALTER FUNCTION to correct the invalid column values in the SYSIBM.SYSROUTINES table.

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.

Use the -START PROCEDURE command to activate the stored procedure.

Use the -START FUNCTION command to activate the user-defined function.

Problem determination:

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 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.

System action: The statement cannot be executed.

Programmer response: If the routine was stopped, use the DB2 -START PROCEDURE or -START FUNCTION command to activate the user-written routine.

The cause of the timeout condition might be one of the following:

- If goal mode is being used to manage the number of WLM-established stored procedure address spaces, the dispatching priority assigned to the caller of the stored procedure might be too low. If the work is of low priority, WLM might leave it queued for a longer period of time.
- The WLM application environment is quiesced. Issue *MVS DISPLAY WLM,APPLENV=wlmenv* command to verify the status of the application environment. The

| *MVS VARY WLM,APPLENV=wlmenv* command can
| be used to activate the environment if it is quiesced.

00E79004

Explanation: DB2 received an SQL CALL statement for a stored procedure. The stored procedure could not be accepted, because the stored procedures address space is not active. The stored procedures address is not active if START DB2 ACCESS (MAINT) is specified or, START DB2 LIGHT (YES) is specified.

System action: The statement cannot be executed.

Programmer response: Re-invoke the routine once DB2 has been started without ACCESS(MAINT) or LIGHT(YES).

Problem determination:

00E79006

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 cannot be honored, because the user-written routine's load module is not compatible with Language Environment preinitialization environment.

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 procedure 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 Environment preinitialization service that failed and the failing return code.

For the required levels of the compilers, see *Application Programming and SQL Guide*.

00E79007

Explanation: An attempt to call a DB2 stored procedure or UDF invocation failed because the host language specified in the LANGUAGE clause of CREATE PROCEDURE or CREATE FUNCTION did not match the language reported by Language Environment.

System action: The attempt to call the stored

procedure fails, and the procedure is marked STOP-REJ.

System programmer response: Use the ALTER FUNCTION or ALTER PROCEDURE statement to correct the LANGUAGE attribute specified for the user-defined function or procedure.

00E79008

Explanation: The SQL CALL statement could not be processed. 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.

| 00E7900A

| **Explanation:** A stored procedure defined as NO WLM
| ENVIRONMENT was invoked. Execution in the
| DB2-managed stored procedures address space (SPAS)
| is no longer supported.

| **System action:** The SQL CALL statement is rejected
| with SQLCODE -471 and this reason code.

| **Programmer response:** Use ALTER PROCEDURE to
| modify the definition of the stored procedure to specify
| a valid WLM ENVIRONMENT. If the stored procedure
| accesses DB2, the load module identified in
| EXTERNAL NAME must be link edited with RRS
| attach (DSNRLI).

00E7900B

Explanation: The SQL CALL statement could not be processed. DB2 determined that the user-defined function or procedure was to be run in a specific WLM-established address space, but the necessary WLM services are not available.

The user-defined function or procedure specified a non-blank WLM ENVIRONMENT attribute.

System action: The SQL CALL statement is rejected with SQLCODE -471 and this reason code.

System programmer response: Issue the START FUNCTION SPECIFIC or START PROCEDURE command to allow the altered user-defined function or procedure to be called.

Programmer response: Use the ALTER FUNCTION or ALTER PROCEDURE statement to modify the WLM ENVIRONMENT attribute specified for the

user-defined function or procedure, or specify the NO WLM ENVIRONMENT clause.

00E7900C

Explanation: SQL CALL statement or user-defined function invocation could not be processed. The WLM application environment 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 ENVIRONMENT 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 activate the application environment.

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.

00E79010

Explanation: DB2 received an SQL CALL statement for a stored procedure. The CALL statement was not accepted because one or more columns of the SYSIBM.SYSROUTINES catalog table for the procedure contains invalid values. The value of the column was valid in a prior release of DB2, but is invalid in this release of DB2.

Possible reasons for this include a LANGUAGE column with value COMPJAVA.

System action: The statement cannot be performed. SQLCODE -471 is returned on the SQL CALL statement with this reason code.

Programmer response: Use ALTER PROCEDURE to correct the invalid column in the SYSIBM.SYSROUTINES catalog table.

To migrate a LANGUAGE COMPJAVA stored procedure to LANGUAGE JAVA, use the following procedure:

1. Ensure that you have a WLM application environment that has been set up to run LANGUAGE JAVA.
2. Put the .class file containing the stored procedure code into a directory that is identified in CLASSPATH in the JAVAENV for your LANGUAGE JAVA WLM application environment. Alternatively, you may put the .class file into a Java JAR file and invoke the SQLJ.INSTALL_JAR built-in stored procedure.
3. Issue an ALTER PROCEDURE command against the stored procedure that specifies LANGUAGE JAVA and WLM ENVIRONMENT *java applenv*.

00E79100

Explanation: An internal DB2 error was encountered while processing a stored procedure request.

System action: The task encountering the error is abended.

System programmer response: This is a DB2 internal error.

User response: Notify the system programmer.

Problem determination: Collect the following diagnostic items:

- SYSABEND, SYSUDUMP, or SYSMDUMP output.

Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00E79101

Explanation: DB2 received an unexpected return code from a WLM service.

System action: A record is written to SYS1.LOGREC and an SVC dump is requested. The application program abends.

System programmer response: Refer to *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 the SYSLOG data set for the period of time spanning the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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00E79102

Explanation: An error occurred while attempting a Java Native Interface function to invoke a Java stored procedure.

System action: The SQL CALL statement fails with SQLCODE -471 and reason code 00E79102.

Programmer response: Check the operator console for message DSNX961I. This message contains information about the Java error.

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 SQLCODE -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 *z/OS TSO/E Messages* and *z/OS TSO/E REXX Reference*.

00E79109

Explanation: A routine was defined to run in a WLM application environment that was not set up correctly for the language that was specified.

Java routines must be run in a WLM application environment that has been set up to run Java routines. This application environment cannot be used to run non-Java routines.

System action: The SQL CALL statement SQLCODE -471 and this reason code.

System programmer response: Use the ALTER PROCEDURE statement if you need to change the WLM application environment.

To set up a WLM application environment to run LANGUAGE JAVA routines, add a JAVAENV DD statement to the startup procedure for the stored procedure address space. The JAVAENV DD statement specifies a data set that contains environment variables for running Java routines.

Programmer response: Contact the system programmer

00E7910A

Explanation: Insufficient storage space available for Native SQL PL debugging. This error can be caused by symbol data that requires more contiguous storage than the SQL PL debug agent can obtain in the WLM managed DB2 SPAS.

System action: SQLCODE -904 is returned to the user with this reason code.

Programmer response: Refresh the WLM ENVIRONMENT FOR DEBUG MODE. Reduce the number of concurrent tasks permitted in the WLM Environment. Consider using fewer variables and shorter variable names in the SQL PL routine.

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.

00E79201

Explanation: DB2 received an SQL statement containing an invocation of a user-defined function. The statement was not accepted because of a prior failing invocation of the user-defined function from the application. The prior failing invocation left the DB2 structures for the user-defined function task in an unusable state.

System action: The statement cannot be executed. SQLCODE -471 is returned with this reason code. If the user-defined function was defined with FINAL CALL YES, then it will be invoked at final call processing time.

Programmer response: Correct the error in the user-defined function program that caused the prior invocation to fail. Modify the invoking application so that it does not continue to invoke the user-defined function after a negative SQLCODE is issued.

00E79300

Explanation: Table creation has failed because DB2 cannot implicitly create a database, or cannot choose an existing available database with naming convention DSN*xxxxx*. The DSN*xxxx* value can range from DSN00001 to DSN*nnnnn*, where *nnnnn* is the maximum value of the sequence SYSIBM.DSNSEQ_IMPLICITDB, with a default value of 10000.

The cause of this failure is usually:

- A lock timeout exists.
- A deadlock condition exists.
- DB2 was unable to access catalog pages.
- On systems that contain a large number of databases: DB2 might have run out of resources to implicitly create a new database.

System action: The CREATE TABLE statement fails.

System programmer response: Use the GET DIAGNOSTICS statement to obtain information about the error conditions that have occurred. Analyze the error conditions to determine whether follow-up actions are necessary. If you suspect an error in DB2, refer to Part 2 of *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 the SYSLOG data set for the period of time spanning the failure.
- Listing of DB2 log output.
- Listing of the results produced by the SQL statements.
- Listing of DB2 catalog tables.
- Definitions of table spaces, tables, and indexes involved in the error.
- Results from SELECT * from SYSIBM.SYSDATABASE.

Related reference

CREATE TABLE (DB2 SQL)

GET DIAGNOSTICS (DB2 SQL)

Chapter 22. X'E8......' codes

Reason code identifiers that begin with 00E8 communicate normal and error situations with initialization procedures.

00E800D2

Explanation: An error was encountered while attempting to obtain the MVS LOCAL lock.

System action: The DB2 subsystem is terminated.

System programmer response: Refer to *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:

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E800D3

Explanation: An error was encountered while attempting to release the MVS LOCAL lock.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E800AF

Explanation: An unsupported function request was detected by the resource manager termination function.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E800D1

Explanation: A resource manager provided notification of failure during local memory-create notification processing.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: Refer to *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 8 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:

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).

- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E800DF

Explanation: An unsupported function request was detected by the address space global common services function.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: Obtain a print of SYS1.LOGREC and the SVC dump. If you suspect an error in DB2, refer to Part 2 of *Utility 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:
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E800B1

Explanation: A service task could not be created during processing of the -STOP DB2 command.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.

- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E800CE

Explanation: MVS was unable to establish an ESTAE for the stop-work notification function.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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: Refer to *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 in error.

Collect the following diagnostic items:
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.

- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Listing of the JCL procedures used to initialize DB2 address spaces.

00E80002

Explanation: The DB2 subsystem services address space was not started by a valid subsystem or an error occurred during MVS IEFSSREQ processing.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: Refer to *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 following diagnostic information: bytes 1 through 4, the subsystem name; bytes 5 through 8, the contents of register 15 that contains the return code set by the MVS IEFSSREQ macro.

Collect the following diagnostic items:

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Listing of the JCL procedures used to initialize DB2 address spaces.

00E80003

Explanation: An unsupported pending function request was detected during processing in the system services address space.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).

- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.

- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E80006

Explanation: An unsupported pending function request was detected during processing in the resource manager address space.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E8000E

Explanation: MVS was unable to establish an ESTAE for the DB2 address space control task.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Listing of the JCL procedures used to initialize DB2 address spaces.

00E80011

Explanation: MVS was unable to make the address space nonswappable.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Listing of the JCL procedures used to initialize DB2 address spaces.

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.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Listing of the JCL procedures used to initialize DB2 address spaces.

00E80013

Explanation: MVS was unable to create a resource manager address space.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: Refer to *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 following diagnostic information: bytes 1 through 4, the four character resource manager address space name; bytes 5 through 8, the MGCR return code.

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:
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.

- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E8001F

Explanation: An unsupported function request was detected by the DB2 address space start function.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E8002F

Explanation: An unsupported function request was detected by the DB2 address space stop function.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E80031

Explanation: An unsupported input parameter was detected for allied address space initialization.

System action: The caller's task is abended.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E80032

Explanation: An unsupported input parameter was detected for allied address space termination.

System action: The caller's task is abended.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E80033

Explanation: This reason code accompanies a X'04F' system abend code. This module detected that the DB2 subsystem was terminating. Refer to the appropriate CICS documentation for information about X'04F' and X'04E' abend completion codes.

System action: The caller's task abnormally terminates with code X'04F'.

System programmer response: Refer to *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:

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E8003C

Explanation: An address space control element (ASCE) could not be located for the executing address space during EOM processing.

System action: The caller's task is abended.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E8003D

Explanation: An unrecovered resource (for example, a latch) was detected for a must-complete function.

System action: The DB2 subsystem abnormally terminates.

Operator response: Notify the system programmer.

System programmer response: Refer to *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 the appropriate CICS documentation for information about X'04F' and X'04E' abend completion codes.

Collect the following diagnostic items:
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E8003E

Explanation: MVS was unable to establish an ESTAE in an address space about to be initialized as a DB2 allied address space.

System action: The caller's task abnormally terminates.

Operator response: Notify the system programmer.

System programmer response: Refer to *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 the appropriate CICS documentation for information about X'04F' and X'04E' abend completion codes.

Collect the following diagnostic items:
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E8003F

Explanation: An unsupported function request was detected by the allied address space control function.

System action: The caller's task is abended.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E8004F

Explanation: An unsupported function request was detected by the allied address space authorization function.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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: Refer to *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:

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E80052

Explanation: A resource manager provided notification of failure during facility startup notification processing.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.

- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E80053

Explanation: A resource manager provided notification of failure during release work notification processing.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E80054

Explanation: The recovery manager (RM) subcomponent provided notification of an error during restart recovery processing.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E80055

Explanation: The recovery manager (RM) subcomponent detected an error during DB2 checkpoint processing.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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:
- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Listing of DSNZPARM module used.

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.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: Refer to *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 the 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 result of an operator-initiated dump command or SLIP trap exit.

00E80058

Explanation: The version of DB2 that you are attempting to start is not compatible with this version of z/OS. This version of DB2 requires a z/Architecture® processor running z/OS V1R7 or above.

System action: Message DSNY012I is issued. 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 z/OS that you are using, or provide the required level of z/OS.

Problem determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested.

Collect the following diagnostic items:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

Related information

DSNY012I (DB2 Messages)

00E80059

Explanation: An error was detected during DB2 initialization processing indicating that the location name is not specified in the DDF communication record from the BSDS.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: Complete the following steps:

1. Verify that the location name in the DDF communication record from the BSDS is specified. A location name must be specified even if DDF is not used.
2. Use the change log inventory utility (DSNJU003) to add or update the location name in the DDF communication record in the BSDS.
3. Start DB2 again.

Problem determination: See installation job DSNTIJUZ, job step DSNTLOG, for an example that uses DSNJU003 to update the DDF communication record. If you used the installation CLIST to install or migrate to this version of DB2, then DSNTIJUZ member in your prefix.NEW.SDSNSAMP library is customized to update the DDF communication record with the values that you specified during installation.

00E8005A

Explanation: An attempt was made to startDB2 on a processor that either does not support z/Architecture, is not enable for 64-bit addressing, or was not enabled to provide a minimum of 128GB of FREE 64-bit SHARED virtual storage for this DB2.

System action: The DB2 subsystem is not started.

This abend is accompanied by message DSNY011I.

Operator response: Notify the system programmer.

System programmer response: You can either:

- Change the DB2 start-up procedures to use a version of DB2 that is compatible with the version of MVS that you are using.
- Provide the required level of MVS with required features enabled.

Problem determination: Diagnostic information is recorded in SYS1.LOGREC, and aDB2 dump is requested.

Collect the following diagnostic items:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

Related information

DSNY011I (DB2 Messages)

00E8005B

Explanation: The DB2 product that you are attempting to start is not compatible with this version of z/OS. This version of DB2 requires a zNALC (System z® New Application License Charges) LPAR.

System action: The DB2 subsystem is not started.

Operator response: Notify the system programmer.

System programmer response: Change the DB2 start-up procedure to use a DB2 product that is compatible with the version of z/OS that you are using, or provide the required level of z/OS. This abend is accompanied by DSNY0261.

Problem determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested.

Collect the following diagnostic items:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E8005F

Explanation: An unsupported function request was detected by the DB2 subsystem startup control function.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E80061

Explanation: A resource manager initialization table (RMIT) that has an invalid format was detected.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E8006F

Explanation: An unsupported function request was detected by the definitional control block management function.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E8007F

Explanation: An unsupported function request was detected by the application program call parameter management function.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E80081

Explanation: An invalid initialization load module list (ILML) was detected.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.

- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E80084

Explanation: A resource manager provided notification of failure during subsystem startup notification processing.

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: Refer to *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:

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Listing of the JCL procedures used to initialize DB2 address spaces.
- Listing of DSNZPARM module used.
- Contents of the BSDS (both copies if dual BSDS in use) obtained by using the DB2 print log map (DSNJU004) utility.
- Output of the GTF trace (if requested by IBM).

00E8008F

Explanation: An unsupported function request was detected by the resource manager initialization function.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E8009F

Explanation: An unsupported function request was detected by the DB2 subsystem shutdown control function.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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'04E' abend completion code.

System action: The DB2 subsystem abnormally terminates.

Operator response: Notify the system programmer.

System programmer response: Refer to *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 the appropriate CICS documentation for information about X'04F' and X'04E' abend completion codes.

Collect the following diagnostic items:
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Listing of DSNZPARM module used.
- Contents of the BSDS (both copies if dual BSDS in use) obtained by using the DB2 print log map (DSNJU004) utility.
- Output of the GTF trace (if requested by IBM).

00E8011D

Explanation: An unrecovered resource (for example, a latch) was detected for a must-complete function.

System action: The DB2 subsystem abnormally terminates.

Operator response: Notify the system programmer.

System programmer response: Refer to *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 the appropriate CICS documentation for information about X'04F' and X'04E' abend completion codes.

Collect the following diagnostic items:
* Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
* SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
* Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E8011E

Explanation: The allied address space task primary ESTAE detected that MVS was unable to establish the secondary ESTAE.

System action: Abnormal termination of allied address space is continued.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:
* Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
* SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
* Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E8011F

Explanation: The allied address space task primary ESTAE was entered without a subsystem diagnostic work area (SDWA) provided by MVS RTM.

System action: Abnormal termination of the allied address space is continued.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:
* Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
* SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
* Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E8012D

Explanation: The allied address space task secondary ESTAE detected an unrecovered resource (for example, a latch) for a 'must complete' function.

System action: The DB2 subsystem abnormally terminates.

Operator response: Notify the system programmer.

System programmer response: Refer to *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 the appropriate CICS documentation for information about X'04F' and X'04E' abend completion codes.

Collect the following diagnostic items:
* Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
* SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
* Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E8012F

Explanation: The allied address space task secondary ESTAE was entered without a subsystem diagnostic work area (SDWA) provided by MVS.

System action: Continue with the abnormal termination of the allied address space.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E80130

Explanation: The FRR that protects the -START/-STOP DB2 command processor function was entered while a valid -STOP DB2 command was being processed.

System action: The DB2 subsystem terminates.

Operator response: Notify the system programmer.

System programmer response: Refer to *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 the appropriate CICS documentation for information about X'04F' and X'04E' abend completion codes.

Collect the following diagnostic items:

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E80140

Explanation: The ESTAE that protects the stop work notification function was entered.

System action: The DB2 subsystem terminates.

Operator response: Notify the system programmer.

System programmer response: Refer to *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 the appropriate CICS documentation for information about X'04F' and X'04E' abend completion codes.

Collect the following diagnostic items:

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E80150

Explanation: An initialization entry point list having an invalid format was detected.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: Refer to *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 holds the name of the load module in which the invalid initialization entry point list exists.

Probable cause is that the module does not contain an initialization entry point list or the linkage editor entry control statement does not specify the initialization entry point list as the module entry point.

Collect the following diagnostic items:

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E80151

Explanation: An invalid module entry point address was detected in an initialization entry point list entry.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: Refer to *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 12-byte field that contains the following diagnostic information: bytes 1 through 8, the name of the load module that contains the initialization entry

point list with the invalid entry; bytes 9 through 12, and the entry number of the initialization entry point list entry. Probable cause is that the initialization entry point list entry defines an invalid module entry point or defines a valid entry point for a module that has not been included in the loaded module.

Collect the following diagnostic items:
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00E8015F

Explanation: An unsupported function request was detected by the module entry point list (MEPL) management function.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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 Part 2 of *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.

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.

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 Part 2 of *Utility Guide and Reference* for information on identifying and reporting the problem.

See message DSNY010I.

Problem determination: See message DSNY010I.

00E80162

Explanation: The DSNHDECP module supplied by DB2 is being used to start DB2. DB2 requires site-dependent settings that are specified in the DSNHDECP module that was created when DB2 was installed. The installation-generated DSNHDECP module typically resides in the SDSNEXIT library.

System action: The DB2 subsystem is not started.

Operator response: Notify the system programmer.

System programmer response: See message DSNT527I.

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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Listing of DSNZPARM module used.

Chapter 23. X'E9......' codes

Reason code identifiers that begin with `00E9` communicate normal and error situations with the system parameter manager.

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-usable 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 Part 2 of *Utility 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:
- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Listing of the JCL procedures used to initialize DB2 address spaces.
- Listing of DSNZPARM module used.

- 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.

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.

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:
- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- Listing of the JCL procedures used to initialize DB2 address spaces.
- Listing of DSNZPARM module used.
- 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.

Explanation: An error was found in the directory control information for a DB2 directory.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested.

Operator response: Notify the system programmer.

00E90203 • 00E90404

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-usable directory can also cause this abend: the
DSNZPARM directory that is established during
installation. (This directory might have had a different
name specified 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 *Diagnosis Guide
and Reference* for information on identifying and
reporting the problem.

Collect the following diagnostic items:

- 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.
- SVC dump (or system dump), taken to
  SYS1.DUMPxx data set, as result of an
  operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by
  executing IFCEREP1.
- Listing of the JCL procedures used to initialize DB2
  address spaces.
- Listing of DSNZPARM module used.
- 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.

Related reference

Operator functions panel: DSNTIPO (DB2
Installation Guide)

00E90203

Explanation: An error was found in the descriptor
control information for a DB2 directory.

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 the
descriptor control information is incorrect for any one
of a number of DB2 directories. One customer-usable
directory can also cause this abend: the DSNZPARM
directory that is established at installation. (This
directory might have had a different name specified
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 *Diagnosis Guide
and Reference* for information on identifying and
reporting the problem.

Collect the following diagnostic items:
- 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.
- SVC dump (or system dump), taken to
  SYS1.DUMPxx data set, as result of an
  operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by
  executing IFCEREP1.
- Listing of the JCL procedures used to initialize DB2
  address spaces.
- Listing of DSNZPARM module used.
- 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.

Related reference

Operator functions panel: DSNTIPO (DB2
Installation Guide)

00E90403

Explanation: A failure occurred when DB2 processed
the -SET SYSPARM command. This error can be caused
by inconsistent data or an internal error in DB2.

System action: A record is written to SYS1.LOGREC,
and an SVC dump is requested.

Operator response: Notify the system programmer.
Collect the following materials listed in

- 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.
- SVC dump (or system dump), taken to
  SYS1.DUMPxx data set, as result of an
  operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by
  executing IFCEREP1.

System programmer response: Obtain the
SYS1.LOGREC and SVC dump from the operator.

If you suspect an error in DB2, refer to Part 2 of
Diagnosis Guide and Reference for information on
identifying and reporting the problem.

00E90404

Explanation: DB2 has detected an error while
processing the -SET SYSPARM command.

System action: A diagnostic record is written to
SYS1.LOGREC, and an SVC dump is requested. The

requesting execution unit abends.

Operator response: Notify the system programmer. Collect the following materials listed in

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

System programmer response: Obtain the SYS1.LOGREC and SVC dump from the operator. If you suspect an error in DB2, refer to Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00E90405

Explanation: An error occurred while DB2 was attempting to create a service task during -SET SYSPARM command processing.

System action: A diagnostic record is written to SYS1.LOGREC, and an SVC dump is requested.

Operator response: Notify the system programmer. Collect the following materials listed in

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

System programmer response: Obtain the SYS1.LOGREC and SVC dump from the operator. If you suspect an error in DB2, refer to Part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Chapter 24. X'F1......' codes

Reason code identifiers that begin with 00F1 communicate normal and error situations with service facilities.

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 *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 Part 2 of *Utility Guide and Reference* for information on identifying and reporting the problem.

Chapter 25. X'F3......' codes

Reason code identifiers that begin with 00F3 communicate normal and error situations with the subsystem support subcomponent.

Many of the these 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.

00F300A6

Explanation: While executing in the PSW key of the caller, an abend occurred during an attempt to access the trusted user parameter that was provided by 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.

00F300A9

Explanation: An abend occurred during an attempt to access the caller-provided location parameter while executing in the PSW key of the caller. This problem is probably the result of a logic error in the requesting program.

System action: The SWITCH_USER request is not processed.

User response: Correct the request and continue processing.

Problem determination: If necessary, add a SYSDUMP or SYSABEND DD statement to your execution JCL, and run the job again. Then review the dump to determine the reason for the problem.

00F300A0

Explanation: An error occurred while processing the package list parameter. The attachment facility provided this parameter on a request to allocate a DB2 special plan to the application. Either an abend occurred accessing the package list or a package list entry is invalid.

System action: The request is not processed.

User response: A dump should be taken for problem analysis.

Problem determination: For the abend case, this reason code is placed in register 15 to identify which parameter was not addressable. The failure is probably the result of a logic error in the requesting program.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- All dumps taken by the attachment facility or requesting application.

00F300A1

Explanation: The global transaction ID (XID) parameter that was provided on a SIGNON request is invalid for one of the following reasons:

- An incorrect XID value was specified
- The value was specified in an incorrect format
- If an address of a global transaction ID was specified, the length values were not within the valid range

System action: The SIGNON request is not processed.

User response: Correct the XID parameter on the SIGNON request.

00F300A7

Explanation: A trusted context is referenced by this SET_TRUSTED or SWITCH_USER call, but it is not defined.

System action: The SET_TRUSTED or SWITCH_USER request is not processed.

User response: Ask the system administrator to create the appropriate trusted context.

00F300A2

Explanation: An IDENTIFY request for connection to DB2 was rejected. DB2 had been started in light mode. Only connection names that have indoubt units of recovery that need to be resolved with this DB2

member are permitted access.

System action: The connection request is not processed.

User response: Retry the connection request after DB2 has been restarted in full access mode, or, attempt to connect to another member of the data sharing group.

00F300A5

Explanation: The USER *authorization ID* is not defined in this trusted context *context name*.

System action: The SIGNON request is not processed.

User response: Contact the system administrator to add the user to the trusted context.

00F300AC

Explanation: An abend occurred during an attempt to access the caller-provided security token parameter while executing in the PSW key of the caller. This problem is probably the result of a logic error in the requesting program.

System action: The SWITCH_USER request is not processed.

User response: Correct the request and continue processing.

Problem determination: If necessary, add a SYSDUMP or SYSABEND DD statement to your execution JCL, and run the job again. Then review the dump to determine the reason for the problem.

00F300AB

Explanation: An abend occurred during an attempt to access the caller-provided original authorization ID parameter while executing in the PSW key of the caller. This problem is probably the result of a logic error in the requesting program.

System action: The SWITCH_USER request is not processed.

User response: Correct the request and continue processing.

Problem determination: If necessary, add a SYSDUMP or SYSABEND DD statement to your execution JCL, and run the job again. Then review the dump to determine the reason for the problem.

00F300A8

Explanation: An abend occurred during an attempt to access the caller-provided password parameter while executing in the PSW key of the caller. This problem is probably the result of a logic error in the requesting program.

System action: The SWITCH_USER request is not processed.

User response: Correct the request and continue processing.

Problem determination: If necessary, add a SYSDUMP or SYSABEND DD statement to your execution JCL, and run the job again. Then review the dump to determine the reason for the problem.

00F300AD

Explanation: The location that is specified by this SET_TRUSTED call is not the current location. This is probably the result of a logic error in the requesting program.

System action: The SET_TRUSTED request is not processed.

User response: Correct the request.

00F300AE

Explanation: A primary authorization ID is specified by this SWITCH_USER call, but it is not defined in this trusted context

System action: The SWITCH_USER request is not processed.

User response: Ask the system administrator to create the appropriate primary authorization ID in this trusted context.

00F300B0

Explanation: The requestor's authorization ID has exceeded the maximum number of concurrent sessions allowed.

System action: The connection request is not processed.

System programmer response: Determine the value of the USER.CSDATA.DSNMUCTL defined for the primary authorization ID in RACF and determine if that value needs to be updated.

Programmer response: Close or end some of the existing connections, and try the request again.

Problem determination: DB2 Version 9.1 for z/OS in a Common Criteria environment (DSN6SPRM COMCRIT= YES) restricts the number of concurrent threads for a primary authorization ID based upon the custom field USER.CSDATA.DSNMUCTL.

00F300A4

Explanation: The application program issued a CALL DSNRLI with function SIGNON, AUTH SIGNON, or CONTEXT SIGNON with a accounting-string parameter that is not supported on this version of DB2.

User response: Correct the request, and continue processing.

| **Explanation:** An abend occurred during an attempt to
| access the caller-provided registry parameter while
| executing in the PSW key of the caller. This problem is
| probably the result of a logic error in the requesting
| program.

| **System action:** The SWITCH_USER request is not
| processed.

| **User response:** Correct the request and continue
| processing.

| **Problem determination:** If necessary, add a SYSDUMP
| or SYSABEND DD statement to your execution JCL,
| and run the job again. Then review the dump to
| determine the reason for the problem.

00F3AFFF

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.

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: Refer to *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 *Recource Access Control Facility (RACF) System
ProgrammerS* for descriptions of the RACROUTE return
and reason codes.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by
  DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by
  executing IFCEREP1.

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00F300A3

Explanation: While executing in the PSW key of the
caller, an abend occurred during an attempt to access
the accounting-string parameter that was provided by
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.

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.

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.

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.

System action: The request is not processed.

System programmer response: See Problem
Determination.

User response: A dump should be taken for problem
analysis.

Problem determination: This reason code is placed in
register 15 during any access to an
attachment-provided function request block (FRB). A
subsequent X'0Cx' abend indicates an FRB
addressability problem. This abend is probably the

result of a logic error in the attachment facility.

Collect the following diagnostic items:

- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- All dumps taken by the attachment facility or requesting application.

00F30004

Explanation: An abend has occurred during an attempt to access the attachment-provided parameter list while executing in the caller's PSW key.

System action: The request is not processed.

System programmer response: See Problem Determination.

User response: A dump should be taken for problem analysis.

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:

- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- All dumps taken by the attachment facility or requesting application.

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.

System action: The request is not processed.

System programmer response: See Problem Determination.

User response: A dump should be taken for problem analysis.

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:

- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- All dumps taken by the attachment facility or requesting application.

00F30006

Explanation: A failure occurred while processing the 'Subsystem Name' 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.

System action: The request is not processed.

System programmer response: See Problem Determination.

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.

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:

- 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.
- All dumps taken by the attachment facility or requesting application.

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.

System action: The request is not processed.

System programmer response: See Problem Determination.

User response: A dump should be taken for problem analysis.

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. This failure is probably the result of a logic error in the attachment facility.

Collect the following diagnostic items:

- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- All dumps taken by the attachment facility or requesting application.

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.

System action: The request is not processed.

System programmer response: See Problem Determination.

User response: A dump should be taken for problem analysis.

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:
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- All dumps taken by the attachment facility or requesting application.

00F30009

Explanation: A request was received to establish a termination ECB, but a termination ECB had already been established for the connected task.

System action: The request is not processed.

System programmer response: Obtain all dumps taken by the attachment facility or invoking application.

User response: A dump should be taken for problem analysis.

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.

System action: The request is not processed.

System programmer response: Obtain all dumps

taken by the attachment facility or invoking application.

User response: A dump should be taken for problem analysis.

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 reported if the application program issued an RRSAF IDENTIFY function request and RRS/MVS was not available.

System action: The request is not processed.

System programmer response: Obtain all dumps taken by the attachment facility or invoking application.

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 IDENTITY request, ensure RRS/MVS is active and retry the request.

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.

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 this DB2 subsystem. This condition might indicate an attempted security violation.

System action: The connection request is denied.

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 Part 3 of *Administration Guide* for examples of how to authorize users for specific DB2 subsystems.

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.

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.

System action: The requester's task is abended with code X'04E'.

System programmer response: See Problem Determination.

User response: A dump should be taken for problem analysis.

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'0C2' abend, an attempt by a nonprivileged program to perform privileged operations.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).

- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- All dumps taken by the attachment facility or requesting application.

00F30015

Explanation: The attachment facility specified an invalid combination of values of FRBRALE and FRBQUAL. No Program Request Handler exists to service the call.

System action: The request is not processed.

System programmer response: Obtain all dumps taken by the attachment facility and requesting application.

User response: A dump should be taken for problem analysis.

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.

System action: The request is not processed.

System programmer response: Obtain all dumps taken by the attachment facility and requesting application.

User response: A dump should be taken for problem analysis.

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.

System action: The request is not processed.

System programmer response: Obtain all dumps

taken by the attachment facility and requesting application.

User response: A dump should be taken for problem analysis.

Problem determination: Register 1 contains a pointer to the FRB at the entry to DSNAPRHX. 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.

System action: The request is not processed.

System programmer response: See Problem Determination.

User 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:

* 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.
* All dumps taken by the attachment facility or requesting application.

00F30019

Explanation: The requester's primary ASID (PASID) is not equal to the home ASID (PSAAOLD).

System action: The request is not processed.

System programmer response: See Problem Determination.

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.

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:

* 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.

* All dumps taken by the attachment facility or requesting application.

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.

System action: The request is not processed.

System programmer response: See Problem Determination.

User response: A dump should be taken for problem analysis.

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:

* Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
* All dumps taken by the attachment facility or requesting application.

00F30021

Explanation: An attachment facility issued a Subsystem Support request, but provided too few or too many parameters.

System action: The request is not processed.

System programmer response: Obtain all dumps taken by the attachment facility or by the requesting application.

User response: A dump should be taken for problem analysis.

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 FRBPARM 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.

System action: The request is not processed.

System programmer response: See Problem Determination.

User response: A dump should be taken for problem analysis.

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 zeroes). The failure is probably the result of a logic error in the attachment facility.

Collect the following diagnostic items:
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- All dumps taken by the attachment facility or requesting application.

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.

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.

System action: The connection request is denied.

System programmer response: See Problem Determination.

User response: A dump should be taken for problem analysis.

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:
- 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.
- All dumps taken by the attachment facility or requesting application.

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.

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.

System action: The request is not processed.

System programmer response: Obtain all dumps taken by the attachment facility and requesting application.

User response: A dump should be taken for problem analysis.

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.

System action: The request is not processed.

System programmer response: See Problem Determination.

User response: A dump should be taken for problem analysis.

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:
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- All dumps taken by the attachment facility or requesting application.

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.

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.

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.

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:
- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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.

System action: The request is not processed.

System programmer response: See Problem Determination.

User response: A dump should be taken for problem analysis.

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:
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- All dumps taken by the attachment facility or requesting application.

00F30033

Explanation: An abend has occurred during an attempt to access the 'Plan Name' parameter while executing in the caller's PSW key.

System action: The request is not processed.

System programmer response: See Problem Determination.

User response: A dump should be taken for problem analysis.

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:
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- All dumps taken by the attachment facility or requesting application.

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.

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.

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:
- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).

- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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.

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.

System action: The request is not processed.

System programmer response: See Problem Determination.

User response: A dump should be taken for problem analysis.

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:
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- All dumps taken by the attachment facility or requesting application.

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.

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.

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.

System programmer response: Refer to message DSNT500I for identification of unavailable resources and diagnostics to be collected. Refer to Appendix F, "Resource types," on page 883 for an explanation of resource type codes.

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.

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.

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:
- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00F30043

Explanation: A terminate request was received with the 'Deallocate' option, but a unit of recovery is still outstanding for the connection. Either 'SYNC' or 'ABRT' must be requested before resources can be deallocated.

System action: The termination request is not processed.

System programmer response: Obtain all dumps taken by the attachment facility or requesting application.

User response: A dump should be taken for problem analysis.

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:
- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- IMS or CICS trace and any dumps.

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.

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.

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.

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 0 and the return code is placed in register 15.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- CICS trace listing.
- CICS attachment facility MVS SNAP dump.
- CICS transaction dump.
- IMS trace output.
- IMS dependent region, control region dump, or both.

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.

System action: The termination request is not processed.

System programmer response: Obtain all dumps taken by the attachment facility or requesting application.

User response: A dump should be taken for problem analysis.

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.

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.

System action: The request is not processed.

System programmer response: See Problem Determination.

User response: A dump should be taken for problem analysis.

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:

- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- All dumps taken by the attachment facility or requesting application.

00F30049

Explanation: A request was received to connect the requester's TCB to a DB2 subsystem, but the TCB is already connected.

System action: The connection request is rejected.

System programmer response: Obtain all dumps taken by the attachment facility or requesting application.

User response: A dump should be taken for problem analysis.

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.

System action: The request is not processed. DB2 will terminate the connection when the TCB terminates.

System programmer response: See Problem Determination.

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.

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:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- All dumps taken by the attachment facility or requesting application.

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.

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.

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:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

System action: The request is not processed.

System programmer response: See Problem Determination.

User response: A dump should be taken for problem analysis.

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:

- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- All dumps taken by the attachment facility or requesting application.

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.

System action: The request is not processed.

System programmer response: Collect all dumps taken by the attachment facility or requesting application.

User response: A dump should be taken for problem analysis.

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.

System action: The connection request is not processed.

System programmer response: Ensure that the DB2 system parameters controlling the maximum number of concurrent identifies are correct. These system parameters are Max Users, Max TSO connect, and Max Batch connect on installation panel DSNTIPE.

User response: Attempt connection to DB2 at a later time.

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.

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.

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 Part 2 of *Utility 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

• SYSABEND, SYSUDUMP, or SYSMDUMP output.

00F30058

Explanation: Access to DB2 has been denied by the site's authorization exit.

System action: The request is not processed.

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.

User response: Contact your security administrator and request authority to access this DB2 subsystem.

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.

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:

• Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).

• Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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:

• Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).

• Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00F30061

Explanation: An abend occurred while referencing the SIGNON request's secondary authorization ID parameter provided by the attachment facility.

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 *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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'.

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:

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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00F30063

Explanation: The DB2 attachment facility for IMS, CICS, or RRSAF provided a secondary authorization ID value, but no primary authorization ID value. This is a violation of the SIGNON protocol.

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: Refer to *Diagnosis*

Guide and Reference for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- CICS trace listing.
- CICS attachment facility MVS SNAP dump.
- CICS transaction dump.
- IMS trace output.
- IMS dependent region, control region dump, or both.
- All dumps taken by the attachment facility or requesting application.

This is probably an error in the attachment facility.

00F30064

Explanation: The DB2 attachment facility for IMS, CICS, or RRSAF 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.

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: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- CICS trace listing.
- CICS attachment facility MVS SNAP dump.
- CICS transaction dump.
- IMS trace output.
- IMS dependent region, control region dump, or both.
- All dumps taken by the attachment facility or requesting application.

This is probably an error in the attachment facility.

00F30065

Explanation: An error occurred in determining the commit state of the thread.

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: Refer to *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

System action: The connection or sign-on request is not processed.

System programmer response: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: A dump should be taken for problem analysis.

Problem determination: A requester of connection or sign-on cannot hold a DB2 latch.

Collect the following diagnostic items:

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).

- All dumps taken by the attachment facility or requesting application.

. 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.

System action: The connection or sign-on request is not processed.

System programmer response: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: A dump should be taken for program analysis.

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:

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- All dumps taken by the attachment facility or requesting application.

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.

System action: The sign-on request is not processed.

System programmer response: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: A dump should be taken for problem analysis.

Problem determination: Collect the following diagnostic items, described in

- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- All dumps taken by the attachment facility or requesting application.

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.

System action: The connection or sign-on request is not processed. The caller is abended with code X'04E' and this reason code.

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.

User response: A dump should be taken for problem analysis.

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

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

System action: The connection or sign-on request is not processed.

System programmer response: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer. A dump should be taken for problem analysis.

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

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).

- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- All dumps taken by the attachment facility or requesting application.

00F30072

Explanation: The requester's authorization ID or password could not be verified. This condition may indicate a security violation.

System action: The connection request is not processed.

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 Part 3 of *Administration Guide* for examples of how to authorize users for specific DB2 subsystems.

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.

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.

System action: The connection request is not processed. The caller is abended with code X'04E' and this reason code.

System programmer response: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: A dump should be taken for problem analysis.

Problem determination: Only one of these flags can be set on when requesting connection processing.

Collect the following diagnostic items, described in

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- All dumps taken by the attachment facility or requesting application.

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.

System action: The connection or sign-on request is not processed.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *Utility Guide and Reference* for information on identifying and reporting the problem. for failure analysis procedures.

User response: Notify the system programmer. A dump should be taken for problem analysis.

Problem determination: Determine why the authorization services service task was not created.

Collect the following diagnostic items, described in

- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- All dumps taken by the attachment facility or requesting application.

00F30075

Explanation: RACROUTE returned an error when a request was made to RACROUTE to free an ACEE.

System action: The connection or sign-on request is not processed.

System programmer response: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: A dump should be taken for problem analysis.

Problem determination: Collect the following diagnostic items, described in

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- All dumps taken by the attachment facility or requesting application.

00F30076

Explanation: An error occurred while attempting to obtain a CCB.

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 *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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.

00F30078

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.

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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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00F30080

Explanation: CSECT DSNAPRHX was unable to cancel its ESTAE.

System action: The application program is abended with code X'04E' and this reason code.

System programmer response: See Problem Determination.

User response: Notify the system programmer. The application may be retried.

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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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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.

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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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00F30082

Explanation: This reason code is returned when the automatic bind for plan is disabled. The automatic bind is disabled through the installation process.

System action: The plan is not automatically bound.

System programmer response: Rebind the plan prior to execution.

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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).

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.

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 retried 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.

User response: If you feel that this is a DB2 problem, notify the system programmer.

Problem determination: If you believe that this error is not the result of the above reason, then collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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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.

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 Part 3 of *Administration Guide* for examples of how to
set up the security controls for remote connection
requests in the communications database.

User response: Verify that you specified the correct
RACF password for this requester.

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.

00F30086

Explanation: The requester's password is expired. This
condition might indicate a security violation.

System action: The connection request is not
processed.

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 Part 3 of *Administration Guide* for examples of how to
set up the security controls for remote connection
requests in the communications database.

User response: Change your password so that it is no
longer expired.

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 expired, the connection request
is terminated with this reason code.

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.

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 Part 3 of *Administration Guide* for examples of how to
set up the security controls for remote connection
requests in the communications database.

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.

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 site's security exit routine failed to
verify the requester, the connection request is
terminated with this reason code.

00F30088

Explanation: The requester's authorization ID was
revoked. This condition might indicate a security
violation.

System action: The connection request is not
processed.

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 Part 3 of *Administration Guide* for examples of how to
set up the security controls for remote connection
requests in the communications database.

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.

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.

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.

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 Part 3 of *Administration Guide* for examples of how to set up the security controls for remote connection requests in the communications database.

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.

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.

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:

00F30091

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:

00F30092

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:

00F30093

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:

00F30094

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.

System programmer response: Examine the console/SYSLOG output for RACF messages issued when the request was denied.

User response: Verify that your new password value meets the installation's requirements for new passwords.

00F30095

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 part 2 of *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:
- 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.

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00F30096

Explanation: An internal error was detected in either DB2 or 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 RRS. Refer to part 2 of *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00F30097

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:

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:

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:

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.

Problem determination: An entry recording this condition is written in SYS1.LOGREC.

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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00F30101

Explanation: The parameter contained in the IEFSSNxx member used to initialize DB2 (and other subsystems) is in error. Refer to message DSN3101I for details.

System programmer response: See message DSN3101I.

Problem determination: Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).

- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00F30102

Explanation: The parameter contained in the IEFSSNxx member used to initialize DB2 (and other subsystems) is in error. The DB2 subsystem recognition character must be not be blank. For details, see message DSN3102I.

System programmer response: See message DSN3102I.

Problem determination: Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00F30103

Explanation: The parameter contained in the IEFSSNxx 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.

System programmer response: See message DSN3103I.

Problem determination: Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

System programmer response: See message DSN3109I.

Problem determination: Collect the following diagnostic items:

- 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.

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

System programmer response: See message DSN3105I. If you suspect an error in DB2, refer to Part 2 of *Utility 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 the SYSLOG data set for the period of time spanning the failure.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00F30106

Explanation: A global transaction identifier from RRS could not be extracted 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 application is abended.

Operator response: Collect the SYS1.LOGREC and SVCDUMP, and notify the system programmer.

System programmer response: This is probably either an error in DB2 or in RRS. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem. If RRS has terminated, restart RRS.

Problem determination: Examine the SVCDUMP to determine the cause of the RRS failure. Register zero contains the return code from the RRS ATRRWID 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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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.

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.

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.

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.

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:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00F30120

Explanation: An error occurred when DB2 invoked the Security Authorization Facility R_ticketserv callable service. DB2 attempted to use this callable service to validate a Kerberos ticket received from a remote client. DB2 generated this reason code in conjunction with message DSN3581I.

System action: Authentification fails.

Operator response: Notify the system programmer.

System programmer response: See message DSN3581I for more information.

User response: Notify the system programmer.

00F30121

Explanation: A DB2 internal error occurred when DB2 invoked the Security Authentification Facility R_ticketserv callable service. DB2 attempted to use this callable service to validate a Kerberos ticket received from a remote client. This reason code is generated in conjunction with message DSN3581I.

System action: Authentification fails. A dump should be taken for problem analysis.

Operator response: Notify the system programmer.

System programmer response: See message DSN3581I for more information. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00F30122

Explanation: An error occurred when DB2 invoked the Security Authorization Facility R_usermap callable service. DB2 attempted to use this callable service to determine the user ID associated with the principal name received via a Kerberos ticket that was received from a remote client. This reason code is generated in conjunction with message DSN3581I.

System action: Authentication fails.

Operator response: Notify the system programmer.

System programmer response: See message DSN3581I for more information.

User response: Notify the system programmer.

00F30123

Explanation: A DB2 internal error occurred when DB2 invoked the Security Authorization Facility R_usermap callable service. DB2 attempted to use this callable service to validate a Kerberos ticket received from a remote client. This reason code is generated in conjunction with message DSN3581I.

System action: Authentication fails. A dump should be taken for problem analysis.

Operator response: Notify the system programmer.

System programmer response: See message DSN3581I for more information. Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

Problem determination: Collect the diagnostic items described in

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

00F30210

Explanation: 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.

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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00F30211

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.

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 error returned from the DEQ 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 DEQ in register 15. This can be used to locate the response area.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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'0C2' abend completion codes instead.)

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 during the invocation.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00F30213

Explanation: The invoker of module DSN3AC0X passed an invalid action code. The only valid codes are 0 (deactivate) and 1 (activate).

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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00F30214

Explanation: The invoker of module DSN3AC0X passed an invalid SSOB function code. The valid codes range from 1 to 255.

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:

- 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.

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00F30215

Explanation: The invoker of module DSN3AC0X passed an invalid 'QUEUE' parameter. The storage provided could not be modified in the DB2 PSW key.

System action: The caller is abended with system completion code of X'0C4'.

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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00F30217

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.

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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00F30218

Explanation: The ERLY block for this DB2 subsystem is in error. The control word that manages command processing is in an undefined state. This is a serious error.

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 the control word, and the current command can be treated as a 'first' (-START) command. Processing of the command continues.
- 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 value of ERLYCMST is greater than 2, the field 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:
- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00F30219

Explanation: The ERLY block for this DB2 subsystem is in error. The control word that manages EOM broadcast processing is in an undefined state. This is a serious error.

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 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:
- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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:
- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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.

Collect the following diagnostic items:
- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00F3021C

Explanation: Module DSN3EC0X 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.

System action: The caller is abended (without ABDUMP). 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, request a stand-alone dump and re-IPL MVS.

System programmer response: Examine the

stand-alone dump, LOGREC entries, and the console log for indications of an MVS failure.

Problem determination: A stand-alone dump is necessary.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- MVS stand-alone dump.

00F3021D

Explanation: Module DSN3RS0X could not establish an ESTAE during either the initialization or termination of the online DB2 subsystem. The caller is abended.

This can occur during initialization if the MVS system address space that is broadcasting the first command (presumed to be the -START command) has insufficient storage. In this case, further entry of commands to the DB2 subsystem may result in a successful start of DB2.

This can occur during termination if the current address space (usually system services, in case of EOM broadcast, an MVS system address space) has insufficient storage. In this case, after the DB2 subsystem has shut down, further entry of commands to the DB2 subsystem may result in a successful start of DB2.

System action: The caller is abended (without ABDUMP). The initialization is aborted, but termination proceeds.

Operator response: Retry the command. If the failure persists, a re-IPL of MVS is necessary and the system programmer should be notified. A stand-alone dump should be requested first.

System programmer response: Examine the stand-alone dump, LOGREC entries, and the console log for indications of an MVS failure.

Problem determination: A stand-alone dump is necessary.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- MVS stand-alone dump.

00F3021E

Explanation: Module DSN3RTR0 could not establish an ESTAE while in the process of routing control to the actual ESTAE routine. The caller (RTM) is abended. This causes the original error to percolate to a higher-level recovery routine and causes this abend to be shown in an RTM recovery environment.

This can occur if the current address space (usually an allied address space) has insufficient storage.

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 LSQA portion of the current address space private area. If necessary, have the size of the private area expanded.

Problem determination: A SYSUDUMP is requested.

Collect the following diagnostic items:

- 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.
- SYSABEND, SYSUDUMP, or SYSMDUMP output.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00F3021F

Explanation: 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.LOGREC data and request an SVC dump.

System action: The caller is not abended. The SSVT is reset to its initial state. Subsystem initialization or termination continues.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00F30220

Explanation: 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.LOGREC data and request an SVC dump.

System action: The caller is not abended. The PRHB is reset to its initial state. Subsystem initialization or termination continues.

System programmer response: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The associated SYS1.LOGREC entries and SVC dump contain the relevant information.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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 *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:

- 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.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00F30310

Explanation: A nonzero return code was received from the recovery manager. It is issued by module DSN3RIA0 (application resolve-indoubt-UR) and by module DSN3RIM0 (resource manager resolve-indoubt-UR).

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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00F30311

Explanation: Module DSN3RIM0 could not establish an ESTAE during the processing of a resolve-indoubt (RMRQ) request. This can occur if the current address space has insufficient storage. This probably leads to an abnormal termination of the DB2 subsystem.

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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00F30313

Explanation: A CCB could not be allocated. This could occur when the storage pool has no more free space available.

System action: The request to obtain a CCB is not processed. The application program is abended with code X'04E' and this reason code.

System programmer response: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: A dump should be taken for problem analysis.

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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).

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.

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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is usually caused by a previous error which should have recorded an entry in 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 Appendix E, "DB2 abend completion codes (X'04E' and X'04F')," on page 881 for information on X'04F' and X'04E' abend completion codes.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).

00F30406

Explanation: The DB2 subsystem was abended by module DSN3SSI1 because the system services address space was forced to an end-of-memory condition.

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 *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 Appendix E, "DB2 abend completion codes (X'04E' and X'04F')," on page 881 for information on X'04F' and X'04E' abend completion codes.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).

00F30407

Explanation: The DB2 subsystem was abended by module DSN3SSI1, because the jobstep task in a resource manager address space terminated.

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 *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 Appendix E, "DB2 abend completion codes (X'04E' and X'04F')," on page 881 for information on X'04F' and X'04E' abend completion codes.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).

00F30408

Explanation: The DB2 subsystem was terminated because a DB2 resource manager address space is in end-of-memory processing.

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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is usually caused by a previous error that recorded data on the SYS1.LOGREC data set 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:

- 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.

- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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 *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).

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.

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 *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).

00F3040B

Explanation: See message DSN3001I.

System programmer response: See message DSN3001I.

Problem determination: Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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 *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).

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.

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 *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:
- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).

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 DSN3SSES attempted to clean up processing and pass the error to the caller, but was unable to do so.

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 DSN3SSES. The ESTAE DSN3SSES 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:
- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).

- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

System action: The DB2 subsystem is terminated with an SVC dump.

Operator response: DB2 may be started again after it terminates. The system programmer should be notified.

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 *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:
- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

System action: The DB2 subsystem is terminated.

Operator response: DB2 may be started again after it terminates.

System programmer response: Refer to *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

00F30411 • 00F30414

SYS1.LOGREC entries and SVC dump(s) should be examined to determine the cause of the error.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).

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.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer. DB2 may be started again after it terminates.

System programmer response: Refer to *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).

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.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer. DB2 may be started again after it terminates.

System programmer response: Refer to *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).

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.

System action: The DB2 subsystem is terminated.

Operator response: DB2 may be started again after it terminates.

System programmer response: Refer to *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).

00F30414

Explanation: The DB2 subsystem was abended, because module DSN3SSI1 (or its caller, DSN3CL0X) was unable to establish the ESTAEs during the processing of a command SSI call. This is probably an MVS problem, because these modules are executing in the MVS CONSOLE address space.

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 system address space that is broadcasting the command has insufficient storage. If you suspect an error in DB2, refer to Part 2 of *Utility 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 CONSOLE function 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 CONSOLE address space

would indicate an MVS problem.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.

00F30415

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 broadcast. This is probably an MVS problem, because these modules are executing in the MVS master scheduler address space.

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 Part 2 of *Utility 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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.

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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.

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 Part 2 of *Utility 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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator-initiated dump command or SLIP trap exit.

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.

System action: The DB2 subsystem is terminated.

Operator response: DB2 can be started again after it terminates.

System programmer response: Refer to *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).

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.

System action: The DB2 subsystem is terminated.

Operator response: DB2 may be started again after it terminates.

System programmer response: Refer to *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).

00F30419

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.

System action: The DB2 subsystem is terminated with an SVC dump.

Operator response: DB2 may be started again after it terminates. The system programmer should be notified.

System programmer response: At least one SVC dump and associated SYS1.LOGREC entries should be available.

System programmer response: Refer to *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00F3041A

Explanation: An ESTAE could not be established by the deferred end-of-task (EOT) processor. This error could occur only during DB2 subsystem startup. Probably, an ESTAE could not be established because of a shortage of LSQA space.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer, and restart DB2.

System programmer response: If the failure persists, increase the size of the system services address space private area.

Problem determination: An SVC dump and associated SYS1.LOGREC entry should be available.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00F3041B

Explanation: The deferred end-of-task (EOT) processor could not locate an AGNT block for the ACE of the agent in abnormal termination. This is a system error.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer, and restart DB2.

System programmer response: Refer to *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).

00F3041C

Explanation: The DB2 subsystem was abended because of a failure of a MEMTERM request for an allied address space.

System action: The DB2 subsystem is terminated.

Operator response: DB2 can be started again after it terminates.

System programmer response: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

User response: Notify the system programmer.

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 dumps should be examined to determine the cause of the error.

Collect the following diagnostic items:
* 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.
* Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).

00F30420

Explanation: A failure occurred during deferred end-of-task (EOT) processing for an agent.

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 *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:
* 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.
* Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).

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.

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 *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:
* 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.
* Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).

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.

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:
* 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.
* Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
* Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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,

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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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00F30453

Explanation: CSECT DSN3SSI1 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.

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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00F30454

Explanation: After discovering an error during the processing of an SSI call, module DSN3SSI1's retry routine found an unknown retry point when it was attempting to retry into the mainline code. This is a DB2 subsystem error.

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 Part 2 of *Utility 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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00F30456

Explanation: CSECT DSN3TM00 could not identify its caller. The only callers supported are: EOT, EOM, RIUR, and CNCL.

System action: The calling task is abended.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00F30457

Explanation: CSECT DSN3TM00 found that the agent termination did not take place after an extra termination request (DSNARARQ).

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: Refer to *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, DSN3SI80, and/or DSN3CT80).

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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:

- 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.
- SYSABEND, SYSUDUMP, or SYSMDUMP output.

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.

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 *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 the SYSLOG data set for the period of time spanning the failure.

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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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.

System programmer response: Use the MVS VARY WLM,APPLENV=name,REFRESH command to refresh the load module in storage.

Programmer response: Modify, relink and rerun the application.

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.

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 part 2 of *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 the SYSLOG data set for the period of time spanning the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

System action: The requester is abended, and the request is not processed.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

System action: The requester is abended, and the request is not processed.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:

- 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.

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00F30503

Explanation: The member DSN6SYSP is missing from DSNZPARM.

System action: DB2 start-up is terminated.

System programmer response: Refer to the coding procedure for DSNZPARM in Part 2 of *Installation Guide*.

Problem determination: DSN6SYSP CSECT is missing from the DSNZPARM load module.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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. (The application program support CALL routine routes control to the program request handlers.)

System action: The requester is abended, and the request is not processed.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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).

System action: The requester is abended, and the request is not processed.

Operator response: Notify the system programmer.

System programmer response: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: An SVC dump and 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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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).

System action: The requester is abended.

Operator response: Notify the system programmer.

System programmer response: Refer to *Diagnosis*

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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 DSN3AMI2. An SVC dump and associated SYS1.LOGREC entries are produced by some DB2 resource manager.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00F30581

Explanation: CSECT DSN3AMI2 found an unknown type of notify message in a message buffer. This is a DB2 subsystem error.

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 Part 2 of *Utility 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 DSN3CL0X.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

System action: The allied task is abended, and the request is not processed.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

System action: The allied task is abended, and the request is not processed.

Operator response: Notify the system programmer.

System programmer response: Refer to *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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).

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: Refer to *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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 SYSLOG should be available.

If you suspect an error in DB2, refer to *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 the SYSLOG data set for the period of time spanning the failure.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00F30610

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.

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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00F30801

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.

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: Refer to *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00F30802

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.

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: Refer to *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00F30803

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.

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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00F30805

Explanation: The caller's connection with DB2 has been terminated, because the DB2 subsystem has terminated or is in the process of terminating abnormally.

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:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00F30901

Explanation: DB2 has lost its cross-memory authority to an allied address space because the ally has released its authorization index.

System action: The allied address space is terminated.

Operator response: Notify the system programmer.

System programmer response: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00F30902

Explanation: DB2 has detected a recursive abend condition while processing end-of-task for a task in an allied address space.

System action: The allied address space is terminated.

Operator response: Notify the system programmer.

System programmer response: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

- 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.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00F30903

Explanation: An abend has occurred while processing End-of-Task for the control address space or a resource manager address space.

System action: The address space is forced to end-of-memory with this reason code.

Operator response: Notify the system programmer.

System programmer response: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

*   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.
*   Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

System action: The address space is forced to end-of-memory with this reason code.

Operator response: Notify the system programmer.

System programmer response: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

*   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.
*   Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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 it was unable to protect its processing by establishing an ESTAE (extended specify task abnormal exit). Insufficient storage might be the reason that the ESTAE could not be established.

This abend code can also be issued when an allied address space is canceled or has gone through abnormal termination and DB2 determines that the address space control element for this allied address space is not deleted or orphaned. In this case, which is not a DB2 error, code 00F30905 is issued to provide documentation for this condition.

System action: The address space is forced to

end-of-memory with this reason code.

Operator response: Notify the system programmer.

System programmer response: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items:

*   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.
*   Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

Problem determination: Attempt to determine if any allied address spaces are storage-constrained, are canceled or have gone through abnormal termination. If an allied address space is canceled or has gone through abnormal termination, you can ignore this abend code or suppress the dump from 00F30905.

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.

00F31100

Explanation: An internal program request was made for an unknown function due to an invalid FRB request qualifier value in FRBQUAL. This condition is considered to be an internal logic error.

System action: The request is abnormally terminated.

System programmer response: Contact the IBM Support Center.

Problem determination: Gather any dump and trace materials that are related to the problem.

00F31104

Explanation: DB2 encountered a logic error while processing an internal program request.

System action: The request is abnormally terminated.

System programmer response: Contact the IBM Support Center.

Problem determination: Gather any dump and trace materials that are related to the problem.

00F31105

Explanation: DB2 encountered a logic error while processing an internal program request.

System action: The request is abnormally terminated.

System programmer response: Contact the IBM Support Center.

Problem determination: Gather any dump and trace materials that are related to the problem.

| **00F31106**

| **Explanation:** DB2 encountered a logic error while
| processing an internal program request.

| **System action:** The request is abnormally terminated.

| **System programmer response:** Contact the IBM
| Support Center.

| **Problem determination:** Gather any dump and trace
| materials that are related to the problem.

| **00F31107**

| **Explanation:** DB2 encountered a logic error while
| processing an internal program request.

| **System action:** The request is abnormally terminated.

| **System programmer response:** Contact the IBM
| Support Center.

| **Problem determination:** Gather any dump and trace
| materials that are related to the problem.

| **00F31108**

| **Explanation:** DB2 encountered a logic error while
| processing an internal program request.

| **System action:** The request is abnormally terminated.

| **System programmer response:** Contact the IBM
| Support Center.

| **Problem determination:** Gather any dump and trace
| materials that are related to the problem.

00F33100

Explanation: The DB2 thread is 'read-only'.

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.

Chapter 26. X'F7......' codes

Reason code identifiers that begin with 00F7 communicate normal and error situations with the group manager.

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 Part 2 of *Utility Guide and Reference* for information on identifying and reporting the problem.

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 *ssnm*MSTR 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 *ssnm*MSTR JCL start procedure.

Problem determination: If you suspect an error in DB2, refer to Part 2 of *Utility Guide and Reference* for information on identifying and reporting the problem.

00F70401

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 Part 2 of *Utility Guide and Reference* for information on identifying and reporting the problem.

00F70402

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 Part 2 of *Utility Guide and Reference* for information on identifying and reporting the problem.

00F70403

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 Part 2 of *Utility Guide and Reference* for information on identifying and reporting the problem.

00F70404

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 Part 2 of *Utility Guide and Reference* for

information on identifying and reporting the problem.

00F70405

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 *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00F70406

Explanation: DB2 issued an XCF macro IXCQUERY, 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: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00F70407

Explanation: The member name and member ID do not match in the BSDS, the XCF function data set, or the SCA structure. The following list contains possible reasons of the detected inconsistency (register 0 contains a reason code and a combination of registers 1 through 5 might contain the mismatched values):

1 The member ID for this member in the BSDS dataset is greater than the allowed maximum (248). Register 2 contains the member ID in the BSDS data set.

2 The member name for this member ID in the SCA does not match the member name in the BSDS data set. Registers 2 and 3 contain the member name in the SCA. Registers 4 and 5 contain the member name in the BSDS data set.

3 A member name saved in the SCA does not match the name saved in XCF couple data set for the same member ID. Registers 2 and 3 contain the member name in the SCA. Registers 4 and 5 contain the member name

saved in the XCF couple data set. Register 5 contains the member ID.

4 The member ID saved in the BSDS dataset does not match what is saved in the XCF couple data set for the starting member. Register 2 contains the member ID in the BSDS data set. Register 3 contains the member ID in the XCF couple data set.

5 The member ID saved in the BSDS data set does not match what is saved in the SCA structure for the starting member. Register 2 contains the member ID in the BSDS data set. Register 3 contains the member ID saved in the SCA structure.

6 The starting member name is not found in the SCA entry. Registers 2 and 3 contain the starting member name.

7 The data sharing group already has 248 members started for it.

System action: The DB2 subsystem terminates.

User response: Review the explanation and compare the information for member names and member IDs in the BSDS dataset, XCF couple dataset, and the DB2 SCA coupling facility structure.

00F70408

Explanation: DB2 issued an MVS XCF 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 Part 2 of *Utility Guide and Reference* for information on identifying and reporting the problem.

00F70409

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 *Diagnosis Guide and*

Reference for information on identifying and reporting the problem.

00F7040A

Explanation: DB2 detected an unexpected error during deletion of a DB2 service task.

System action: DB2 terminates.

System programmer response: Investigate the problem and call the IBM support center.

Problem determination: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00F70410

Explanation: DB2 detected an unexpected error during IRLM locking.

System action: DB2 terminates.

System programmer response: Investigate the problem.

Problem determination: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00F70600

Explanation: The connection to the shared communications area (SCA) was lost.

System action: DB2 terminates because DB2 data sharing cannot function without the SCA.

System programmer response: Figure out why the SCA link to this central processor complex (CPC) is lost and correct the problem. Then restart DB2.

User response: Notify the system programmer.

Problem determination: If there is an active SFM policy which specifies that a rebuild of the SCA should occur, refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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.

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.

User response: Notify the system programmer.

Problem determination:

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.

System programmer response: Refer to message DSN7506I for more information

User response: Notify the system programmer.

Problem determination:

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.

System programmer response: Refer to message DSN7508I for more information.

User response: Notify the system programmer.

Problem determination:

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.

System programmer response: Refer to messages DSN7506A and DSN7508I for more information

User response: Notify the system programmer.

Problem determination:

00F70605

Explanation: DB2 cannot create a needed service task. This is a DB2 internal error.

System action: DB2 terminates.

System programmer response: Investigate the problem.

User response: Notify the system programmer.

Problem determination: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00F70606

Explanation: DB2 detected an unexpected error. This is a DB2 internal error.

System action: DB2 terminates.

System programmer response: Investigate the problem.

User response: Notify the system programmer.

Problem determination: Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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.

System programmer response: Investigate the problem.

User response: Notify the system programmer.

Problem determination: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00F70608

Explanation: DB2 detected an unexpected error. This is a DB2 internal error.

System action: DB2 terminates.

System programmer response: Investigate the problem.

User response: Notify the system programmer.

Problem determination: Refer to part 2 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

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 entrywritten.

System programmer response: Refer to for a full description of actions in the SCA full scenario section.

Problem determination:

Chapter 27. X'F9......' codes

Reason code identifiers that begin with `00F9` communicate normal and error situations with the general command processor.

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 Part 2 of *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.

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 Part 2 of *Utility 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 Chapter 27, "X'F9......' codes."

00F90001

Explanation: A command processor has been invoked via the application program support function. CSECT DSN9SCNF obtained the LOCAL lock of the caller's address space prior to obtaining a response message buffer, but was then unable to release the lock. This condition, if it occurs, is a serious one.

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: Refer to *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 Chapter 27, "X'F9......' codes."

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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: Refer to *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 Chapter 27, "X'F9......' codes," on page 833.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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: Refer to *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 Chapter 27, "X'F9......' codes," on page 833.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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.

System programmer response: Refer to *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 Chapter 27, "X'F9......' codes," on page 833.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

00F90005

Explanation: A routine of the multiple console support (MCS) service of MVS was not able to create an ESTAE recovery environment. This condition is detected when the ESTAE service of MVS returns a nonzero return code. The command from the associated MCS console is not executed. Refer to the appropriate MVS publication for an explanation of ESTAE return codes.

System action: Command processing is terminated.

Operator response: Print the contents of the SYS1.LOGREC data set. If a dump was produced, have it printed.

System programmer response: Refer to *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: If available, the diagnostic data table (DDT control block) will appear in the SDWA variable recording area (VRA). For additional diagnostic information, see Chapter 27, "X'F9......' codes," on page 833.

Collect the following diagnostic items:

- 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.

- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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. It may be necessary to restart the attachment (IMS or CICS) or the DB2 subsystem.

System programmer response: Refer to *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 Chapter 27, "X'F9......' codes," on page 833.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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: Refer to *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 Chapter 27, "X'F9......' codes," on page 833.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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: Refer to *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 Chapter 27, "X'F9......' codes," on page 833.

Collect the following diagnostic items:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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'00F90009'. 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.

System programmer response: Refer to *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 Chapter 27, "X'F9......' codes," on page
833.

Collect the following diagnostic items:

* 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.
* Dynamic dump, taken to SYS1.DUMPxx data set, by
  DB2 (04E and 04F abends).
* Listing of SYS1.LOGREC data set, obtained by
  executing IFCEREP1.

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.

System action: Command execution was abended. 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: Refer to *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 Chapter 27, "X'F9......' codes," on page
833.

Collect the following diagnostic items:

* 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.

* Dynamic dump, taken to SYS1.DUMPxx data set, by
  DB2 (04E and 04F abends).
* Listing of SYS1.LOGREC data set, obtained by
  executing IFCEREP1.

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.

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: Refer to *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 Chapter 27,
"X'F9......' codes," on page 833.

Collect the following diagnostic items:

* 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.
* Dynamic dump, taken to SYS1.DUMPxx data set, by
  DB2 (04E and 04F abends).
* Listing of SYS1.LOGREC data set, obtained by
  executing IFCEREP1.

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.

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: Refer to *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:

- 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.
- Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E and 04F abends).
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

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.

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.

Part 3. Appendixes

Appendix A. SNA sense codes

You might encounter SNA sense codes when you work with DB2. Some of these codes are issued by DB2 when an error is detected on an LU 6.2 conversation. Other codes are not issued by DB2, but they are related to complex problems that are associated with DB2 use of SNA functions and can be difficult to diagnose.

Many other SNA sense codes are not described here. For information about all SNA sense codes, including the ones that are not described here, see Sense data (Systems Network Architecture 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.

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.

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, insure the NEWAUTHID column of the SYSIBM.USERNAMES table is the authorization ID to be used at the remote site.
- If password encryption is used (ENCRYPTPSWDS='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 sent 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.

User response: Notify the communications database administrator.

Problem determination: Collect the following diagnostic items:

- 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.
- Listing of the contents of the SYSIBM.IPNAMES and SYSIBM.LUNAMES tables at the local DB2 subsystem and the remote DB2 subsystem.
- Listing of the contents of the SYSIBM.USERNAMES table at the local DB2 subsystem and the remote DB2 subsystem.
- Statistics Class 4 trace record for the LUWID associated with the failing request.

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.

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.

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: Collect the following diagnostic items:

- 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.
- Listing of the contents of the SYSIBM.IPNAMES and SYSIBM.LUNAMES tables at the local DB2 subsystem and the remote DB2 subsystem.
- Listing of the contents of the SYSIBM.USERNAMES table at the local DB2 subsystem and the remote DB2 subsystem.
- Statistics Class 4 trace record for the LUWID associated with the failing request.

080FFF01

Explanation: An attempt to allocate a VTAM LU6.2 conversation failed because the password supplied to the server was incorrect.

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: Collect the following diagnostic items:

- 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.
- Listing of the contents of the SYSIBM.IPNAMES and SYSIBM.LUNAMES tables at the local DB2 subsystem and the remote DB2 subsystem.
- Listing of the contents of the SYSIBM.USERNAMES table at the local DB2 subsystem and the remote DB2 subsystem.
- Statistics Class 4 trace record for the LUWID associated with the failing request.

080FFF02

Explanation: An attempt to allocate a VTAM LU6.2 conversation failed because the userid specified on the request was revoked at the server system.

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: Collect the following diagnostic items:

- 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.
- Listing of the contents of the SYSIBM.IPNAMES and SYSIBM.LUNAMES tables at the local DB2 subsystem and the remote DB2 subsystem.
- Listing of the contents of the SYSIBM.USERNAMES table at the local DB2 subsystem and the remote DB2 subsystem.
- Statistics Class 4 trace record for the LUWID associated with the failing request.

080FFF03

Explanation: An attempt to allocate a VTAM LU6.2 conversation failed because the userid supplied to the server was invalid.

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: Collect the following diagnostic items:

- 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.
- Listing of the contents of the SYSIBM.IPNAMES and SYSIBM.LUNAMES tables at the local DB2 subsystem and the remote DB2 subsystem.
- Listing of the contents of the SYSIBM.USERNAMES table at the local DB2 subsystem and the remote DB2 subsystem.
- Statistics Class 4 trace record for the LUWID associated with the failing request.

080FFF04

Explanation: An attempt to allocate a VTAM LU6.2 conversation failed because no userid was present in the connection request.

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.

080FFF05

Explanation: An attempt to allocate a VTAM LU6.2 conversation failed because a password was not supplied in the connection request.

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.

08120000

Explanation: A VTAM LU6.2 conversation was terminated due to a resource shortage.

System action: The LU6.2 conversation is terminated.

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.

User response: Notify the systems programmer.

Problem determination: Collect the following diagnostic items:

- 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.

084B0000

Explanation: A VTAM LU6.2 conversation was terminated due to a resource shortage.

System action: The LU6.2 conversation is terminated.

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.

User response: Notify the systems programmer.

Problem determination: Collect the following diagnostic items:

- 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.

084B6031

Explanation: A VTAM LU6.2 conversation was terminated due to a resource shortage.

System action: The LU6.2 conversation is terminated.

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.

User response: Notify the systems programmer.

Problem determination: Collect the following diagnostic items:

- 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.

08570008

Explanation: A VTAM LU6.2 conversation is not allowed because the LU session required for the processing of the request is not active.

System action: The LU6.2 conversation is terminated.

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.

User response: Notify the system programmer about the network failure.

Problem determination: Collect the following diagnostic items:

- 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.

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.

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.

System programmer response: Look for messages or SVC dumps at the site which issued the DEALLOCATE TYPE(ABEND_PROG).

User response: Notify the systems programmer.

Problem determination: Collect the following diagnostic items:

- 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.

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.

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.

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.

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.

Problem determination: Collect the following diagnostic items:

- 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.

08640002

Explanation: An SNA conversation was terminated with an SNA ABEND_TIMER indication.

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 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.

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.

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.

User response: Notify the systems programmer.

Problem determination: Collect the following diagnostic items:

- 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.
- Listing of the contents of the SYSIBM.IPNAMES and SYSIBM.LUNAMES tables at the local DB2 subsystem and the remote DB2 subsystem.
- Listing of the contents of the SYSIBM.USERNAMES table at the local DB2 subsystem and the remote DB2 subsystem.
- Statistics Class 4 trace record for the LUWID associated with the failing request.

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.

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.

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=SYNCPOINT 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.

User response: Notify the systems programmer.

Problem determination: Collect the following diagnostic items:

- 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.
- Listing of the contents of the SYSIBM.IPNAMES and SYSIBM.LUNAMES tables at the local DB2 subsystem and the remote DB2 subsystem.
- Listing of the contents of the SYSIBM.USERNAMES table at the local DB2 subsystem and the remote DB2 subsystem.
- Statistics Class 4 trace record for the LUWID associated with the failing request.

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.

System action: The attempt to allocate an APPC conversation is rejected.

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.

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.

Problem determination: Collect the following diagnostic items:

- 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.
- Listing of the contents of the SYSIBM.IPNAMES and SYSIBM.LUNAMES tables at the local DB2 subsystem and the remote DB2 subsystem.
- Listing of the contents of the SYSIBM.USERNAMES table at the local DB2 subsystem and the remote DB2 subsystem.

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.

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.

User response: Notify the systems programmer.

Problem determination: Collect the following diagnostic items:

- 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.
- Listing of the contents of the SYSIBM.IPNAMES and SYSIBM.LUNAMES tables at the local DB2 subsystem and the remote DB2 subsystem.
- Listing of the contents of the SYSIBM.USERNAMES table at the local DB2 subsystem and the remote DB2 subsystem.
- Statistics Class 4 trace record for the LUWID associated with the failing request.

10086041

Explanation: An SNA FMH5 was received that requested a SYNC_LEVEL that 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.

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.

User response: Notify the systems programmer.

Problem determination: Collect the following diagnostic items:

- 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.

- Listing of the contents of the SYSIBM.IPNAMES and SYSIBM.LUNAMES tables at the local DB2 subsystem and the remote DB2 subsystem.
- Listing of the contents of the SYSIBM.USERNAMES table at the local DB2 subsystem and the remote DB2 subsystem.
- Statistics Class 4 trace record for the LUWID associated with the failing request.

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.

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.

User response: Notify the systems programmer.

Problem determination: Collect the following diagnostic items:

- 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.
- Listing of the contents of the SYSIBM.IPNAMES and SYSIBM.LUNAMES tables at the local DB2 subsystem and the remote DB2 subsystem.

Appendix B. New, changed, and deleted codes

Reason codes and SQL codes are added to, changed in, and removed from DB2 Version 9.1 for z/OS, as necessary.

Lists of new, changed, and deleted reason and SQL codes are available exclusively in the online version of this information.

New, changed, and deleted codes

Appendix C. z/OS diagnostic services

DB2 uses functional recovery routines that run MVS and z/OS services to provide diagnostic information for assistance in problem determination.

Functional recovery routines used by DB2 run MVS and z/OS 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 that occur 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.

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.

Appendix D. SQLSTATE values and common error codes

DB2 produces SQLSTATE values when it works 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*.

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 3 identifies the SQLSTATE class codes. Subsequent tables describe the subcodes for each class code.

Table 3. SQLSTATE Class Codes

Class Code	Meaning	For subcodes, refer to...
00	Unqualified Successful Completion	Table 4 on page 852
01	Warning	Table 5 on page 852
02	No Data	Table 6 on page 856
07	Dynamic SQL Error	Table 7 on page 856
08	Connection Exception	Table 8 on page 856
09	Triggered Action Exception	Table 9 on page 857
0A	Feature Not Supported	Table 10 on page 857
0F	Invalid Token	Table 11 on page 857
0K	Resignal When Handler Not Active	Table 12 on page 857
0N	SQL/XML Mapping Error	Table 13 on page 857
10	XQuery Error	Table 14 on page 857
20	Case not found for CASE statement	Table 15 on page 857
21	Cardinality Violation	Table 16 on page 857
22	Data Exception	Table 17 on page 858
23	Constraint Violation	Table 18 on page 859
24	Invalid Cursor State	Table 19 on page 860
25	Invalid Transaction State	Table 20 on page 861

Table 3. SQLSTATE Class Codes (continued)

Class Code	Meaning	For subcodes, refer to...
26	Invalid SQL Statement Identifier	Table 21 on page 861
2D	Invalid Transaction Termination	Table 22 on page 861
34	Invalid Cursor Name	Table 23 on page 861
35	Invalid Condition Number	Table 24 on page 861
36	Cursor Sensitivity Exception	Table 25 on page 862
37	Syntax Error (OBSOLETE)	Table 26 on page 862
38	External Function Exception	Table 27 on page 862
39	External Function Call Exception	Table 28 on page 863
3B	Savepoint Exception	Table 29 on page 863
3C	Ambiguous Cursor Name	Table 30 on page 863
40	Transaction Rollback	Table 31 on page 864
42	Syntax Error or Access Rule Violation	Table 32 on page 864
44	WITH CHECK OPTION Violation	Table 33 on page 872
46	Java Errors	Table 34 on page 872
51	Invalid Application State	Table 35 on page 872
53	Invalid Operand or Inconsistent Specification	Table 36 on page 873
54	SQL or Product Limit Exceeded	Table 37 on page 874
55	Object Not in Prerequisite State	Table 38 on page 875
56	Miscellaneous SQL or Product Error	Table 39 on page 876
57	Resource Not Available or Operator Intervention	Table 40 on page 878
58	System Error	Table 41 on page 879

Table 4. Class Code 00: Unqualified Successful Completion

SQLSTATE Value	Meaning	SQLCODE Values
00000	Execution of the SQL statement was successful and did not result in any type of warning or exception condition.	+000

Table 5. Class Code 01: Warning

SQLSTATE Value	Meaning	SQLCODE Values
01xxx	Valid warning SQLSTATEs returned by an SQL routine. Also used for RAISE_ERROR and SIGNAL.	+438
01003	Null values were eliminated from the argument of an aggregate function.	+000
01004	The value of a string was truncated when assigned to another string data type with a shorter length.	+000, +445, +20141
01005	Insufficient number of entries in an SQLDA.	+236, +238, +239
0100C	One or more ad hoc result sets were returned from the procedure.	+466
0100E	The procedure returned too many result sets.	+464
01011	The PATH value has been truncated.	+20348
01503	The number of result columns is larger than the number of variables provided.	+000

Table 5. Class Code 01: Warning (continued)

SQLSTATE Value	Meaning	SQLCODE Values
01504	The UPDATE or DELETE statement does not include a WHERE clause.	+000
01505	The statement was not executed because it is unacceptable in this environment.	+000
01506	An adjustment was made to a DATE or TIMESTAMP value to correct an invalid date resulting from an arithmetic operation.	+000
01507	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.	+000
01514	The tablespace has been placed in the check-pending state.	+162
01515	The null value has been assigned to a variable, because the non-null value of the column is not within the range of the variable.	+304
01516	An inapplicable WITH GRANT OPTION has been ignored.	+558
01517	A character that could not be converted was replaced with a substitute character.	+000, +335
01519	The null value has been assigned to a variable, because a numeric value is out of range.	+802
01520	The null value has been assigned to a variable, because the characters cannot be converted.	+331
01521	A specified server-name is undefined but is not needed until the statement is executed or the alias is used.	+402
01522	The local table or view name used in the CREATE ALIAS statement is undefined.	+403
01523	ALL was interpreted to exclude ALTER, INDEX, REFERENCES, and TRIGGER, because these privileges cannot be granted to a remote user.	+561
01524	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.	+000
01525	The number of INSERT values is not the same as the number of columns.	+117
01527	A SET statement references a special register that does not exist at the AS.	+799
01528	WHERE NOT NULL is ignored, because the index key cannot contain null values.	+645
01529	As a result of the DROP INDEX, the UNIQUE constraint is no longer enforced.	
01530	Definition change may require a corresponding change on the read-only systems.	+738
01532	An undefined object name was detected.	+204, +219
01533	An undefined column name was detected.	+205, +206
01537	An SQL statement cannot be EXPLAINed, because it references a remote object.	+218
01538	The table cannot be subsequently defined as a dependent, because it has the maximum number of columns.	+650
01539	Connection is successful but only SBCS characters should be used.	+863
01540	A limit key has been truncated to 40 bytes.	
01542	Authorization ID does not have the privilege to perform the operation as specified.	+552
01543	A duplicate constraint has been ignored.	+541

Table 5. Class Code 01: Warning (continued)

SQLSTATE Value	Meaning	SQLCODE Values
01545	An unqualified column name has been interpreted as a correlated reference.	+012
01546	A column of the explanation table is improperly defined.	+220
01548	The authorization ID does not have the privilege to perform the specified operation on the identified object.	+551
01551	A table in a partitioned tablespace is not available, because its partitioned index has not been created.	+653
01552	An ambiguous qualified column name was resolved to the first of the duplicate names in the FROM clause.	+203
01553	Isolation level RR conflicts with a tablespace locksize of page.	+806
01554	Decimal multiplication may cause overflow.	+807
01558	A distribution protocol has been violated.	+30100
01560	A redundant GRANT has been ignored.	+562
01561	An update to a data capture table was not signaled to the originating subsystem.	+110
01565	The null value has been assigned to a variable, because a miscellaneous data exception occurred; for example, the character value for the CAST, DECIMAL, FLOAT, or INTEGER scalar function is invalid; a floating-point NAN (not a number) or invalid data in packed decimal field was detected.	+20365
01566	The index has been placed in a pending state.	+610
01568	The dynamic SQL statement ends with a semicolon.	+098
01569	The statement will be executed at a DB2 system that does not support character conversion.	
01590	Type 2 indexes do not have subpages.	+111
01591	The result of the positioned UPDATE or DELETE may depend on the order of the rows.	+535
01594	Insufficient number of entries in an SQLDA for ALL information (i.e. not enough descriptors to return the distinct name).	+237
01596	Comparison functions were not created for a distinct type based on a long string data type.	+599
01597	Specific and non-specific volume IDs are not allowed in a storage group.	+655
01600	SUBPAGES ignored on alter of catalog index.	+658
01602	The optimization level has been reduced.	+20007
01605	A recursive common table expression may contain an infinite loop.	+347
01608	An unsupported value has been replaced.	+434
01612	The part clause of a LOCK TABLE statement is not valid.	
01614	There are fewer locators than the number of result sets.	+494
01616	The estimated CPU cost exceeds the resource limit.	+495
01624	The GBPCACHE specification is ignored because the bufferpool does not allow caching.	+20002
01625	The schema name appears more than once in the CURRENT PATH.	+585
01628	The user-specified access path hints are invalid. The access path hints are ignored.	+395
01629	User-specified access path hints were used during access path selection.	+394

Table 5. Class Code 01: Warning (continued)

SQLSTATE Value	Meaning	SQLCODE Values
01635	Statements in the same program have duplicate QUERYNOs.	
01638	SUBPAGES greater than one are not supported for Type 1 indexes in a data sharing environment.	
01640	ROLLBACK TO SAVEPOINT occurred when there were uncommitted INSERTs or DELETEs that cannot be rolled back.	+883
01643	Assignment to SQLCODE or SQLSTATE variable does not signal a warning or error,	+385
01644	DEFINE NO is not applicable for a lob space or data sets using the VCAT option.	+20122
01656	ROLLBACK TO savepoint caused a NOT LOGGED table space to be placed in the LPL.	+20187
01658	Binary data is invalid for DECRYPT_CHAR and DECRYPT_DB.	+20224
01659	A non-atomic statement successfully processed all requested rows with one or more warning conditions.	+252
01663	NOT PADDED clause is ignored for indexes created on auxiliary tables.	+20245
01664	Option not specified following the ALTER PARTITION CLAUSE.	+20270
01666	The last partition's limit key value is set to the highest or lowest possible value.	+20272
01668	A rowset FETCH statement returned one or more rows of data, with one or more bind out processing error conditions. Use GET DIAGNOSTICS for more information.	+354
01679	A trusted connection cannot be established for the specified system authorization ID.	+20360
01680	The option is not supported in the context in which it was specified.	+20367
01681	The trusted context is no longer defined to be used by specific attribute value.	+20368
01682	The ability to use the trusted context was removed from some but not all authorization IDs specified in the statement.	+20371
01683	A SELECT containing a non-ATOMIC data change statement successfully returned some rows, but one or more warnings or error occurred.	+20378
0168B	An operation was partially successful and partially unsuccessful. Use GET DIAGNOSTICS for more information.	+361
0168C	A decimal float operation produced an inexact result.	+364
0168D	A decimal floating point operation was invalid.	+364
0168E	A decimal float operation produced an overflow or underflow.	+364
0168F	A decimal float operation produced division by zero.	+364
0168G	A decimal float operation produced a subnormal number.	+364
0168I	The SQL statement does conform to the specified flagging level. No routine was found with the specified name and compatible arguments.	+440
01Hxx	Valid warning SQLSTATEs returned by a user-defined function or external procedure CALL.	+462
01H54	The procedure has returned successfully but encountered an error in the format or content of a parameter. Information about the error in the parameter value is returned in an output parameter.	+20458

Table 5. Class Code 01: Warning (continued)

SQLSTATE Value	Meaning	SQLCODE Values
01H55	The procedure has returned successfully but encountered an internal processing error. Information about the internal error situation is returned in an output parameter.	+20459
01H56	The procedure has returned successfully but supports a higher version for a parameter than the one that was specified.	+20460
01H57	The procedure has returned output in an alternate locale instead of the locale specified.	+20461

Table 6. Class Code 02: No Data

SQLSTATE Value	Meaning	SQLCODE Values
02000	One of the following exceptions occurred: • The result of the SELECT INTO statement or the subselect of the INSERT statement was an empty table. • The number of rows identified in the searched UPDATE or DELETE statement was zero. • The position of the cursor referenced in the FETCH statement was after the last row of the result table. • The fetch orientation is invalid	+100, +231
02502	Delete or update hole detected.	+222
02504	FETCH PRIOR ROWSET returned a partial rowset.	+20237

Table 7. Class Code 07: Dynamic SQL Error

SQLSTATE Value	Meaning	SQLCODE Values
07001	The number of variables is not correct for the number of parameter markers.	-313
07002	The call parameter list or control block is invalid.	-804
07003	The statement identified in the EXECUTE statement is a select-statement, or is not in a prepared state.	-518
07005	The statement name of the cursor identifies a prepared statement that cannot be associated with a cursor.	-517
07501	The option specified on PREPARE is not valid.	-20186

Table 8. Class Code 08: Connection Exception

SQLSTATE Value	Meaning	SQLCODE Values
08001	The application requester is unable to establish the connection.	-808, -30080, -30081, -30082
08002	The connection already exists.	-842
08003	The connection does not exist.	-843, -900
08004	The application server rejected establishment of the connection.	-1403, -30060, -30061

Table 9. Class Code 09: Triggered Action Exception

SQLSTATE Value	Meaning	SQLCODE Values
09000	A triggered SQL statement failed.	-723

Table 10. Class Code 0A: Feature Not Supported

SQLSTATE Value	Meaning	SQLCODE Values
0A001	The CONNECT statement is invalid, because the process is not in the connectable state.	-752

Table 11. Class Code 0F: Invalid Token

SQLSTATE Value	Meaning	SQLCODE Values
0F001	The locator value does not currently represent any value.	-423

Table 12. Class Code 0K: Resignal When Handler Not Active

SQLSTATE Value	Meaning	SQLCODE Values
0K000	A RESIGNAL was issued but a handler is not active.	-787

Table 13. Class Code 0N: SQL/XML Mapping Error

SQLSTATE Value	Meaning	SQLCODE Values
0N002	A character cannot be mapped to a valid XML character.	-20377

Table 14. Class Code 10: XQUERY Error

SQLSTATE Value	Meaning	SQLCODE Values
10501	An XQuery expression is missing the assignment of a static or dynamic context component.	-16000, -16001
10505	A character, token, or clause is missing or invalid in an XQuery expression.	-16002, -16007
10506	An XQuery expression references a name that is not defined.	-16005, -16009
10507	A type error was encountered processing an XPath or XQuery expression.	-16003

Table 15. Class Code 20: Case not found for CASE statement

SQLSTATE Value	Meaning	SQLCODE Values
20000	The case was not found for the CASE statement.	-773

Table 16. Class Code 21: Cardinality Violation

SQLSTATE Value	Meaning	SQLCODE Values
21000	The result of a SELECT INTO, scalar fullselect, or subquery of a basic predicate is more than one value.	-811

Table 16. Class Code 21: Cardinality Violation (continued)

SQLSTATE Value	Meaning	SQLCODE Values
21501	A multiple-row INSERT into a self-referencing table is invalid.	-533
21502	A multiple-row UPDATE of a primary key is invalid.	-534

Table 17. Class Code 22: Data Exception

SQLSTATE Value	Meaning	SQLCODE Values
22001	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.	-302, -404, -433
22002	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.	-305
22003	A numeric value is out of range.	-302, -304, -406, -413, -802
22004	A null value is not allowed.	-087
22007	An invalid datetime format was detected; that is, an invalid string representation or value was specified.	-180, -181
22008	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.	-183
2200L	The XML value is not a well-formed document with a single root element.	-20345
2200M	The XML document is not valid.	-20398, -20399, -20400
2200S	The XML comment is not valid.	-20331
2200T	The XML processing instruction is not valid.	-20332
2200V	A context item is an XML sequence of more than one item.	-20382
2200W	An XML value contained data that could not be serialized.	-20412
22011	A substring error occurred; for example, an argument of SUBSTR or SUBSTRING is out of range.	-138
22012	Division by zero is invalid.	-802
22018	The character value for the CAST, DECIMAL, FLOAT, or INTEGER scalar function is invalid.	-420
22019	The LIKE predicate has an invalid escape character.	-130
22021	A character is not in the coded character set or the conversion is not supported.	-330, -331
22023	A parameter or host variable value is invalid.	-310
22024	A NUL-terminated input host variable or parameter did not contain a NUL.	-300
22025	The LIKE predicate string pattern contains an invalid occurrence of an escape character.	-130
22501	The length control field of a variable length string is negative or greater than the maximum.	-311
22503	The string representation of a name is invalid.	-188
22504	A mixed data value is invalid.	-191

Table 17. Class Code 22: Data Exception (continued)

SQLSTATE Value	Meaning	SQLCODE Values
22505	The local date or time length has been increased, but the executing program relies on the old length.	-186
22506	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.	-187
22508	CURRENT PACKAGESET is blank.	-812
22511	ADT length exceeds maximum column length. The value for a ROWID or reference column is not valid.	-399
22512	A host variable in a predicate is invalid, because its indicator variable is negative.	-309
22522	A CCSID value is not valid at all, not valid for the data type or subtype, or not valid for the encoding scheme.	-189
22525	Partitioning key value is not valid.	-327
22527	Invalid input data detected for a multiple-row insert.	-30106
22528	Binary data is invalid for DECRYPT_CHAR and DECRYPT_DB	-20224
22529	A non-atomic statement successfully completed for at least one row, but one or more errors occurred.	-253
22530	A non-atomic statement attempted to process multiple rows of data, but no row was inserted and one or more errors occurred.	-254
22531	The argument of a built-in or system provided routine resulted in an error.	-20295
22532	An XSROBJECT is not found in the XML schema repository.	-20330
22533	A unique XSROBJECT could not be found in the XML schema repository.	-20335
22534	An XML schema document is not connected to the other XML schema documents using an include or redefine.	-20340
22537	A rowset FETCH statement returned one or more rows of data, with one or more non-terminating error conditions. Use GET DIAGNOSTICS for more information.	-354
225DE	An XML schema cannot be enabled for decomposition.	-16246, -16247, -16248, -16249, -16250, -16251, -16252, -16253, -16254, -16255, -16257, -16258, -16259, -16260, -16262, -16265, -16266

Table 18. Class Code 23: Constraint Violation

SQLSTATE Value	Meaning	SQLCODE Values
23502	An insert or update value is null, but the column cannot contain null values.	-407
23503	The insert or update value of a foreign key is invalid.	-530
23504	The update or delete of a parent key is prevented by a NO ACTION update or delete rule.	-531, -532
23505	A violation of the constraint imposed by a unique index or a unique constraint occurred.	-803

Table 18. Class Code 23: Constraint Violation (continued)

SQLSTATE Value	Meaning	SQLCODE Values
23506	A violation of a constraint imposed by an edit or validation procedure occurred.	-652
23507	A violation of a constraint imposed by a field procedure occurred.	-681
23508	A violation of a constraint imposed by the DDL Registration Facility occurred.	-690
23509	The owner of the package has constrained its use to environments which do not include that of the application process.	-807
23510	A violation of a constraint on the use of the command imposed by the RLST table occurred.	-908
23511	A parent row cannot be deleted, because the check constraint restricts the deletion.	-543
23512	The check constraint cannot be added, because the table contains rows that do not satisfy the constraint definition.	-544
23513	The resulting row of the INSERT or UPDATE does not conform to the check constraint definition.	-545
23515	The unique index could not be created or unique constraint added, because the table contains duplicate values of the specified key.	-603
23522	The range of values for the identity column or sequence is exhausted.	-359
23523	An invalid value has been provided for the SECURITY LABEL column.	-695
23525	A violation of a constraint imposed by an XML values index occurred.	-20305
23526	An XML valued index could not be created because the table data contains values that violate a constraint imposed by the index.	-20306

Table 19. Class Code 24: Invalid Cursor State

SQLSTATE Value	Meaning	SQLCODE Values
24501	The identified cursor is not open.	-500, -501, -507
24502	The cursor identified in an OPEN statement is already open.	-502
24504	The cursor identified in the UPDATE, DELETE, SET, or GET statement is not positioned on a row.	-508
24506	The statement identified in the PREPARE is the statement of an open cursor.	-519
24510	An UPDATE or DELETE operation was attempted against a delete or update hole.	-222
24512	The result table does not agree with the base table.	-224
24513	FETCH NEXT, PRIOR, CURRENT, or RELATIVE is not allowed, because the cursor position is not known.	-227, -353
24516	A cursor has already been assigned to a result set.	-499
24517	A cursor was left open by an external function or method.	-472
24518	A cursor is not defined to handle row sets, but a rowset was requested.	-20185

Table 19. Class Code 24: Invalid Cursor State (continued)

SQLSTATE Value	Meaning	SQLCODE Values
24519	A hole was detected on a multiple row FETCH statement, but indicator variables were not provided.	-247
24520	The cursor identified in the UPDATE or DELETE statement is not positioned on a rowset.	-589
24521	A positioned DELETE or UPDATE statement specified a row of a rowset, but the row is not contained within the current rowset.	-248
24522	The fetch orientation is inconsistent with the definition of the cursor and whether rowsets are supported for the cursor.	-249
24524	A FETCH CURRENT CONTINUE was requested, but there is no truncated LOB or XML data to return.	-20411

Table 20. Class Code 25: Invalid Transaction State

SQLSTATE Value	Meaning	SQLCODE Values
25000	An insert, update, or delete operation is invalid in the context where it is specified..	-571, -817, -30090

Table 21. Class Code 26: Invalid SQL Statement Identifier

SQLSTATE Value	Meaning	SQLCODE Values
26501	The statement identified does not exist.	-514, -516, -20248

Table 22. Class Code 2D: Invalid Transaction Termination

SQLSTATE Value	Meaning	SQLCODE Values
2D521	SQL COMMIT or ROLLBACK are invalid in the current operating environment.	-925 -926
2D528	Dynamic COMMIT or COMMIT ON RETURN procedure is invalid for the application execution environment	-426
2D529	Dynamic ROLLBACK is invalid for the application execution environment.	-427

Table 23. Class Code 34: Invalid Cursor Name

SQLSTATE Value	Meaning	SQLCODE Values
34000	Cursor name is invalid.	-504

Table 24. Class Code 35: Invalid Condition Number

SQLSTATE Value	Meaning	SQLCODE Values
35000	Condition number is invalid.	-393

Table 25. Class Code 36: Cursor Sensitivity Exception

SQLSTATE Value	Meaning	SQLCODE Values
36001	A SENSITIVE cursor cannot be defined for the specified select-statement.	-243

Table 26. Class Code 37: Syntax Error (OBSOLETE)

SQLSTATE Value	Meaning	SQLCODE Values
37520	Read-only SCROLL was specified with the UPDATE clause.	-438

Table 27. Class Code 38: External Function Exception

SQLSTATE Value	Meaning	SQLCODE Values
38xxx	Valid error SQLSTATEs returned by an external routine or trigger.	-443
38000	A Java routine has exited with an exception.	-4302
38001	The external routine is not allowed to execute SQL statements.	-487
38002	The external routine attempted to modify data, but the routine was not defined as MODIFIES SQL DATA.	-577
38003	The statement is not allowed in a routine.	-751
38004	The external routine attempted to read data, but the routine was not defined as READS SQL DATA.	-579
38401	DB2 MQ user-defined function failed to connect to the WebSphere® MQ queue manager.	
38402	DB2 MQ user-defined function failed to open the WebSphere MQ queue.	
38403	DB2 MQ user-defined function failed to send a message to WebSphere MQ queue.	
38404	DB2 MQ user-defined function failed to retrieve a message from WebSphere MQ queue.	
38405	DB2 MQ user-defined function failed to close the WebSphere MQ queue.	
38406	DB2 MQ user-defined function failed to disconnect from WebSphere MQ queue manager.	
38407	DB2 MQ user-defined function failed to access MQ service/MQ policy table.	
38408	DB2 MQ user-defined function failed due to insufficient storage.	
38409	DB2 MQ user-defined function failed because specified service is not found in MQ service table.	
38410	DB2 MQ user-defined function failed because specified policy is not found in MQ policy table.	
38503	A user-defined function or procedure has abnormally terminated (abend).	-430
38504	A routine has been interrupted by the user.	-431
38505	An SQL statement is not allowed in a routine on a FINAL CALL.	-396
38554	The procedure has encountered an unsupported version number for a parameter.	-20457

Table 27. Class Code 38: External Function Exception (continued)

SQLSTATE Value	Meaning	SQLCODE Values
38H01	An MQSeries® function failed to initialize.	-443
38H02	MQSeries Application Messaging Interface failed to terminate the session.	-443
38H03	MQSeries Application Messaging Interface failed to properly process a message.	-443
38H04	MQSeries Application Messaging Interface failed in sending a message.	-443
38H05	MQSeries Application Messaging Interface failed to read/receive a message.	-443
38H06	An MQSeries Application Messaging Interface message was truncated.	-443
38H10	Error occurred during text search processing	-20423
38H11	Text search support is not available.	-20424
38!12	Text search is not allowed on a column because a text index does not exist on the column.	-20425
38H13	A conflicting Text Search Administration procedure is running on the same text index.	-20426
38H14	Text search administration procedure error.	-20427

Table 28. Class Code 39: External Function Call Exception

SQLSTATE Value	Meaning	SQLCODE Values
39004	A null value is not allowed for an IN or INOUT argument when using PARAMETER STYLE GENERAL or an argument that is a Java primitive type.	-470
39501	An output argument value returned from a function or a procedure was too long.	-450

Table 29. Class Code 3B: Savepoint Exception

SQLSTATE Value	Meaning	SQLCODE Values
3B001	The savepoint is not valid.	-880
3B501	A duplicate savepoint name was detected.	-881
3B502	A RELEASE or ROLLBACK TO SAVEPOINT was specified, but a savepoint does not exist.	-882
3B503	A SAVEPOINT, RELEASE SAVEPOINT, or ROLLBACK TO SAVEPOINT is not allowed in a trigger, function, or global transaction.	-20111

Table 30. Class Code 3C: Ambiguous Cursor Name

SQLSTATE Value	Meaning	SQLCODE Values
3C000	The cursor name is ambiguous.	-051

Table 31. Class Code 40: Transaction Rollback

SQLSTATE Value	Meaning	SQLCODE Values
40001	Deadlock or timeout with automatic rollback occurred.	-911

Table 32. Class Code 42: Syntax Error or Access Rule Violation

SQLSTATE Value	Meaning	SQLCODE Values
42501	The authorization ID does not have the privilege to perform the specified operation on the identified object.	-551, -567, -20265
42502	The authorization ID does not have the privilege to perform the operation as specified.	-164, -552, -554, -555
42503	The authorization ID specified in SET CURRENT SQLID is not one of the authorization IDs of the application process.	-553
42504	A specified privilege, security label, or exemption cannot be revoked from a specified authorization-name.	-556
42505	Connection authorization failure occurred.	-922
42506	Owner authorization failure occurred.	-30053
42509	SQL statement is not authorized, because of the DYNAMICRULES option.	-549
42510	The authorization ID does not have the privilege to create functions or procedures in the WLM environment.	-592
42512	The authorization ID does not have security to the protected column.	-20264
42513	The authorization ID does not have the MLS WRITE-DOWN privilege.	-20281
42517	The specified authorization ID is not allowed to use the trusted context.	-20361
42601	A character, token, or clause is invalid or missing.	-007, -029, -097, -104, -108, -109, -111, -115, -123, -128, -199, -441, -491, -638, -1760
42602	A character that is invalid in a name has been detected.	-113, -251
42603	An un-terminated string constant has been detected.	-010
42604	An invalid numeric or string constant has been detected.	-103, -105
42605	The number of arguments specified for a scalar function is invalid.	-170
42606	An invalid hexadecimal constant has been detected.	-110
42607	An operand of an aggregate function or CONCAT operator is invalid.	-112, -409
42608	The use of NULL or DEFAULT in VALUES or an assignment statement is invalid.	-584
42609	All operands of an operator or predicate are parameter markers.	-417
42610	A parameter marker is not allowed.	-184, -418
42611	The column, argument, parameter, or global variable definition is invalid.	-604
42612	The statement string is an SQL statement that is not acceptable in the context in which it is presented.	-084, -142
42613	Clauses are mutually exclusive.	-628
42614	A duplicate keyword is invalid.	-637

Table 32. Class Code 42: Syntax Error or Access Rule Violation (continued)

SQLSTATE Value	Meaning	SQLCODE Values
42615	An invalid alternative was detected.	-644
42617	The statement string is blank or empty.	-198
42618	A host variable is not allowed.	-312, -5012
42620	Read-only SCROLL was specified with the UPDATE clause.	-228
42621	The check constraint or generated column expression is invalid.	-546, -548
42622	A name or label is too long.	-107
42623	A DEFAULT clause cannot be specified.	-373
42625	A CASE expression is invalid.	-580, -582
42626	A column specification is not allowed for a CREATE INDEX that is built on an auxiliary table.	-767
42629	Parameter names must be specified for SQL routines.	-078
42630	An SQLSTATE or SQLCODE variable is not valid in this context.	-056
42633	An AS clause is required for an argument of XMLATTRIBUTES or XMLFOREST.	-20227
42634	The XML name is not valid.	-20275
42701	The same target is specified more than once for assignment in the same SQL statement.	-121
42702	A column reference is ambiguous, because of duplicate names.	-203
42703	An undefined column or parameter name was detected.	-205, -206, -5001
42704	An undefined object or constraint name was detected.	-096, -204, -219, -722
42705	An undefined server-name was detected.	-950
42707	A column name in ORDER BY does not identify a column of the result table.	-208
42708	The locale specified in a SET LOCALE or locale sensitive function was not found.	-229
42709	A duplicate column name was specified in a key column list.	-537
42710	A duplicate object or constraint name was detected.	-456, -601, -719, -720, -721
42711	A duplicate column name was detected in the object definition or ALTER TABLE statement.	-612
42712	A duplicate table designator was detected in the FROM clause. or REFERENCING clause of a CREATE TRIGGER statement.	-212
42713	A duplicate object was detected in a list or is the same as an existing object.	-242
42714	A host variable can be defined only once.	-314
42718	The local server name is not defined.	-250
42721	The special register name is unknown at the server.	-725
42723	A function with the same signature already exists in the schema.	-454
42724	Unable to access an external program used for a user-defined function or a procedure.	-444
42725	A function was referenced directly (not by either signature or by specific instance name), but there is more than one specific instance of that routine.	-476

Table 32. Class Code 42: Syntax Error or Access Rule Violation (continued)

SQLSTATE Value	Meaning	SQLCODE Values
42726	Duplicate names for common table expressions were detected.	-340
42732	A duplicate schema name in a special register was detected.	-585
42734	A duplicate parameter-name, SQL variable name, label, or condition-name was detected.	-590
42736	The label specified on the GOTO, ITERATE, or LEAVE statement is not found or not valid.	-779
42737	The condition specified is not defined.	-781
42749	An XML schema document with the same target namespace and schema location already exists for the XML schema.	-20328
4274A	An XSROBJECT is not found in the XML schema repository.	-20330
4274B	A unique XSROBJECT could not be found in the XML schema repository.	-20335
4274C	The specified attribute was not found in the trusted context.	-20362
4274D	The specified attribute already exists in the trusted context.	-20363
4274E	The specified attribute is not supported in the trusted context.	-20370
42801	Isolation level UR is invalid, because the result table is not read-only.	-173
42802	The number of insert or update values is not the same as the number of columns.	-117
42803	A column reference in the SELECT or HAVING clause is invalid, because it is not a grouping column; or a column reference in the GROUP BY clause is invalid.	-119, -122
42804	The result expressions in a CASE expression are not compatible.	-581
42805	An integer in the ORDER BY clause does not identify a column of the result table.	-125
42806	A value cannot be assigned to a host variable, because the data types are not compatible.	-303
42807	The INSERT, UPDATE, or DELETE is not permitted on this object.	-150
42808	A column identified in the INSERT or UPDATE statement is not updateable.	-151
42809	The identified object is not the type of object to which the statement applies.	-148, -152, -156, -159
42810	A view is identified in a FOREIGN KEY clause.	-157
42811	The number of columns specified is not the same as the number of columns in the SELECT clause.	-158
42813	WITH CHECK OPTION cannot be used for the specified view.	- 160
42815	The data type, length, scale, value, or CCSID is invalid.	-060, -171, -451, -713, -846
42816	A datetime value or duration in an expression is invalid.	-182
42818	The operands of an operator or function are not compatible.	-131, -401, - 20353
42819	An operand of an arithmetic operation or an operand of a function that requires a number is not a number.	-402
42820	A numeric constant is too long, or it has a value that is not within the range of its data type.	-405, -410
42821	A data type for an assignment to a column is not compatible with the column data type.	-408

Table 32. Class Code 42: Syntax Error or Access Rule Violation (continued)

SQLSTATE Value	Meaning	SQLCODE Values
42822	An expression in the ORDER BY clause or GROUP BY clause is not valid.	-214
42823	The SELECT clause of a subquery specifies multiple columns.	-412
42824	An operand of LIKE is not a string, or the first operand is not a column.	-132, -414
42825	The rows of UNION, INTERSECT, EXCEPT, or VALUES do not have compatible columns.	-415, –344
42826	The rows of UNION, INTERSECT, EXCEPT, or VALUES do not have the same number of columns.	-421
42827	The table identified in the UPDATE or DELETE is not the same table designated by the cursor.	-509
42828	The table designated by the cursor of the UPDATE or DELETE statement cannot be modified, or the cursor is read-only.	-510
42829	FOR UPDATE OF is invalid, because the result table designated by the cursor cannot be modified.	-126, -511
42830	The foreign key does not conform to the description of the parent key.	-538
42831	A column of a primary key, unique key, or ROWID does not allow null values.	-542, - 593, -594
42832	The operation is not allowed on system objects.	-607, -618
42834	SET NULL cannot be specified, because the foreign key does not allow null values.	-629
42835	Cyclic references cannot be specified between named derived tables.	-341
42836	The specification of a recursive, named derived table is invalid.	-345, -346
42837	The column cannot be altered, because its attributes are not compatible with the current column attributes.	-190
42842	A column definition is invalid, because a specified option is inconsistent with the column description.	-683
42845	An invalid use of a NOT DETERMINISTIC or EXTERNAL ACTION function was detected.	-583
42846	Cast from source type to target type is not supported.	-461
42849	The specified option is not supported for routines.	-20102
42852	The privileges specified in GRANT or REVOKE are invalid or inconsistent. (For example, GRANT ALTER on a view.)	-557
42855	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.	-392
42856	The alter of a CCSID to the specified CCSID is not valid.	-20104
42866	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.	-475
42867	Conflicting options have been specified.	-857
42872	FETCH statement clauses are incompatible with the cursor definition.	-225

Table 32. Class Code 42: Syntax Error or Access Rule Violation (continued)

SQLSTATE Value	Meaning	SQLCODE Values
42873	An invalid number of rows was specified in a multiple-row FETCH or multiple-row INSERT.	-246
42877	The column name cannot be qualified.	-197
42878	An invalid function or procedure name was used with the EXTERNAL keyword.	-449
42879	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.	-492
42880	The CAST TO and CAST FROM data types are incompatible, or would always result in truncation of a fixed string.	-453
42882	The specific instance name qualifier is not equal to the function name qualifier.	-455
42883	No function was found with a matching signature.	-458
42884	No function or procedure was found with the specified name and compatible arguments.	-440
42885	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.	-483
42886	The IN, OUT, or INOUT parameter attributes do not match.	-469
42887	The function is not valid in the context where it occurs.	-390
42888	The table does not have a primary key.	-539
42889	The table already has a primary key.	-624
42890	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.	-573
42893	The object or constraint cannot be dropped, altered, or transferred or authorities cannot be revoked from the object, because other objects are dependent on it.	-478, -616
42894	The value of a column or sequence attribute is invalid.	-574
42895	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.	-301
42898	An invalid correlated reference or transition table was detected in a trigger.	-696
42899	Correlated references and column names are not allowed for triggered actions with the FOR EACH STATEMENT clause.	-697
428A1	Unable to access a file referenced by a file reference variable.	-452
428B3	An invalid SQLSTATE was specified.	-435
428B4	The part clause of a LOCK TABLE statement is not valid.	-240
428B7	A number specified in an SQL statement is out of the valid range.	-490
428C1	Only one ROWID column can be specified for a table.	-372
428C2	Examination of the function body indicates that the given clause should have been specified on the CREATE FUNCTION statement.	-374
428C4	The number of elements on each side of the predicate operator is not the same.	-216

Table 32. Class Code 42: Syntax Error or Access Rule Violation (continued)

SQLSTATE Value	Meaning	SQLCODE Values
428C7	A ROWID or reference column specification is not valid.	-771, -867
428C9	A ROWID or IDENTITY column cannot be specified as the target column of an INSERT or UPDATE.	-798
428D2	AS LOCATOR cannot be specified for a non-LOB parameter.	-398
428D3	GENERATED is not allowed for the specified data type or attribute of a column.	-397
428D4	A cursor specified in a FOR statement cannot be referenced in an OPEN, CLOSE, or FETCH statement.	-776
428D5	The ending label does not match the beginning label.	-778
428D6	UNDO is not allowed for NOT ATOMIC compound statements.	-780
428D7	The condition value is not allowed.	–782
428D8	The sqlcode or sqlstate variable declaration is not valid.	–785
428EC	The fullselect specified for the materialized query table is not valid.	-20058
428EK	The schema qualifier is not valid.	-079, -20376
428EW	The table cannot be converted to or from a materialized query table.	-20093
428F2	An integer expression must be specified on a RETURN statement in an SQL procedure.	-058
428F4	The SENSITIVITY specified on FETCH is not allowed for the cursor.	-244
428F5	The invocation of a function is ambiguous.	-245
428F9	A sequence expression cannot be specified in this context.	-348
428FA	The scale of the decimal number must be zero.	-336
428FB	Sequence-name must not be a sequence generated by the system.	-20142
428FC	The length of the encryption password is not valid.	-20144
428FE	The data is not a result of the ENCRYPT function.	-20146
428FJ	ORDER BY or FETCH FIRST is not allowed in the outer fullselect of a view or materialized query table.	-20211
428FL	A data change statement is not allowed in the context in which it was specified.	-20165
428FM	An SQL data change statement within a SELECT specified a view which is not a symmetric view..	-20166
428FP	Only one INSTEAD OF trigger is allowed for each kind of operation on a view.	-20178
428FQ	An INSTEAD OF trigger must not specify a view that is defined using WITH CHECK OPTION, a view that is defined on another view that is defined WITH CHECK OPTION, or a view that is nested in a view that is defined with the WITH ROW MOVEMENT clause.	-20179
428FR	A column cannot be altered as specified.	-20180
428FS	A column cannot be added to an index.	-20181
428FT	The table is not compatible with the specified data partitioning operation.	-20183
428FW	A column cannot be added, dropped, or altered in a materialized query table.	

Table 32. Class Code 42: Syntax Error or Access Rule Violation (continued)

SQLSTATE Value	Meaning	SQLCODE Values
428FY	A column cannot be added, dropped, or altered in a materialized query table.	-20235
428G3	FINAL TABLE is not valid wen the target view of the SQL data change statement in a fullselect has an INSTEAD OF trigger defined.	-20257
428G4	Invalid use of INPUT SEQUENCE ordering.	-20258
428G5	The assignment clause of the UPDATE statement must specify at least one column that is not an INCLUDE column.	-20260
428GB	A character could not be converted and substitution characters are not allowed.	-20286
428GC	An invalid string length unit was specified for a function.	-20289
428GH	The data type of one or more parameters specified in the ADD VERSION clause does not match the corresponding data type in the routine being altered.	-20314
428GI	An XML schema is not complete because an XML schema document is missing.	-20329
428GJ	The table cannot be truncated because DELETE triggers exist for the table or the table is a parent table of a referential constraint that would be affected by the statement.	-20356
428GL	The system authorization ID specified for a trusted context is already specified in another trusted context.	-20372
428GM	The trusted context is already defined to be used by this authorization ID, profile name, or PUBLIC.	-20373
428GN	The specified authorization ID or PUBLIC is not defined in the specified trusted context.	-20374
428GU	A table must include at least one column that is not implicitly hidden.	-20422
42901	A column function does not include a column name.	
42902	The object of the INSERT, UPDATE, or DELETE is also identified (possibly implicitly through a view) in a FROM clause.	-118
42903	A WHERE, VALUES, GROUP BY, HAVING, or SET clause includes an invalid reference, such as a column or OLAP function.	-120
42905	DISTINCT is specified more than once in a subselect.	-127
42906	A aggregate function in a subquery of a HAVING clause includes an expression that applies an operator to a correlated reference.	-133
42907	The string is too long in the context it was specified.	-134, -416, -586
42908	The statement does not include a required column list.	-153, -343
42909	CREATE VIEW includes an operator or operand that is not valid for views. For example, UNION or UNION ALL.	-154
42911	A decimal divide operation is invalid, because the result would have a negative scale.	-419
42912	A column cannot be updated, because it is not identified in the UPDATE clause of the select-statement of the cursor.	+503
42914	The DELETE is invalid, because a table referenced in a subquery can be affected by the operation.	-536
42915	An invalid referential constraint has been detected.	-632, -633, -634, -635

Table 32. Class Code 42: Syntax Error or Access Rule Violation (continued)

SQLSTATE Value	Meaning	SQLCODE Values
42917	The object cannot be explicitly dropped.	-147, -658, -667, -669
42918	A user-defined data type cannot be created with a system-defined data type name (for example, INTEGER).	-473
42920	A GROUP BY or HAVING clause is implicitly or explicitly specified in a SELECT INTO or a subquery of a basic predicate.	
42924	An alias resolved to another alias rather than a table or view at the remote location.	-513
42925	Recursive named derived tables cannot specify SELECT DISTINCT and must specify UNION ALL.	-342
42927	The function cannot be altered to NOT DETERMINISTIC or EXTERNAL ACTION because it is referenced by one or more existing views.	-20073
42932	The program preparation assumptions are incorrect.	-30052
42939	The name cannot be used, because the specified identifier is reserved for system use.	-457, -20074
42945	ALTER CCSID is not allowed on a table space or database that contains a view.	-20106
42961	The server name specified does not match the current server.	-114
42962	A long column, LOB column, structured type column or datalink column cannot be used in an index, a key, or a constraint.	-350
42963	Invalid specification of a security label column.	-20240
42969	The package was not created.	-917
42972	An expression in a join-condition references columns in more than one of the operand tables.	-338
42986	The source table in a RENAME TABLE statement is referenced in a view, trigger, or constraint.	-750
42987	The statement is not allowed in a trigger.	-797
42988	The operation is not allowed with mixed ASCII data.	-875
42993	The column, as defined, is too large to be logged.	-355
42995	The requested function does not apply to global temporary tables.	-526
42997	Capability is not supported by this version of the DB2 applicaton requester, DB2 application server, or the combination of the two.	-270
429B1	A stored procedure specifying COMMIT ON RETURN cannot be the target of a nested CALL statement.	-729
429BI	The condition area is full and cannot handle more errors for a NOT ATOMIC statement.	-20252
429BN	A CREATE statement cannot be processed when the value of CURRENT SCHEMA differs from CURRENT SQLID.	-20283
429BQ	The specified alter of the data type or attribute is not allowed.	-4703
429BR	UPDATE and INSERT can only appear once in a MERGE statement.	-20297
429BS	Invalid index definition involving an XMLPATTERN clause or a column defined with a data type of XML.	-20304
429BV	Invalid specification of a ROW CHANGE TIMESTAMP column,	-20354

Table 32. Class Code 42: Syntax Error or Access Rule Violation (continued)

SQLSTATE Value	Meaning	SQLCODE Values
429BW	The statement cannot be processed due to related implicitly created objects.	-20355
429BX	The expression for an index key is not valid.	-356
429BY	The statement is not allowed when using a trusted connection.	-4707
429C1	A data type cannot be determined for an untyped parameter marker.	-20433

Table 33. Class Code 44: WITH CHECK OPTION Violation

SQLSTATE Value	Meaning	SQLCODE Values
44000	The INSERT or UPDATE is not allowed, because a resulting row does not satisfy the view definition.	-161

Table 34. Class Code 46: Java Errors

SQLSTATE Value	Meaning	SQLCODE Values
46001	The URL specified on an install or replace of a jar procedure did not identify a valid jar file.	-20200
46002	The jar name specified on the install, replace, or remove of a Java procedure is not valid.	-20201
46003	The jar file cannot be removed, a class is in use by a procedure.	-20202
46007	A Java function has a Java method with an invalid signature.	-20203
46008	A Java function could not map to a single Java method.	-20204
4600C	The jar cannot be removed. It is in use.	-20310
4600D	The value provided for the new Java path is invalid.	-20311
4600E	The alter of the jar failed because the specified path references itself.	-20312
46103	A Java routine encountered a ClassNotFound exception.	-20212
46501	The install or remove jar procedure specified the use of a deployment descriptor.	-20207
46502	A user-defined procedure has returned a DYNAMIC RESULT SET of an invalid class. The parameter is not a DB2 result set.	-20213

Table 35. Class Code 51: Invalid Application State

SQLSTATE Value	Meaning	SQLCODE Values
51002	The package corresponding to an SQL statement execution request was not found.	-805
51003	Consistency tokens do not match.	-818
51004	An address in the SQLDA is invalid.	-822
51005	The previous system error has disabled this function.	-906
51006	A valid connection has not been established.	-927
51008	The release number of the program or package is not valid.	-992

Table 35. Class Code 51: Invalid Application State (continued)

SQLSTATE Value	Meaning	SQLCODE Values
51015	An attempt was made to execute a section that was found to be in error at bind time.	-525
51021	SQL statements cannot be executed until the application process executes a rollback operation.	-918, -939
51024	A view cannot be used, because it has been marked inoperative.	-575
51030	The procedure referenced in a DESCRIBE PROCEDURE statement or an ALLOCATE CURSOR statement has not yet been called within the application process.	-480, -482
51032	A valid CCSID has not yet been specified for this DB2 for z/OS subsystem.	-872
51033	The operation is not allowed because it operates on a result set that was not created by the current server.	-496
51034	The routine defined with MODIFIES SQL DATA is not valid in the context in which it is invoked.	-740
51035	A PREVIOUS VALUE expression cannot be used because a value has not been generated for the sequence yet in this session.	-845
51036	An implicit connect to a remote server is not allowed because a savepoint is outstanding.	-20110
51039	The ENCRYPTION PASSWORD value is not set.	-20143

Table 36. Class Code 53: Invalid Operand or Inconsistent Specification

SQLSTATE Value	Meaning	SQLCODE Values
53001	A clause is invalid, because the table space is a workfile.	-620
53004	DSNDB07 is the implicit workfile database.	-742
53014	The specified OBID is invalid.	-736
53022	Variable or parameter is not allowed.	-20107
53035	Key limits must be specified in the CREATE INDEX statement.	-660
53036	The number of PARTITION specifications is not the same as the number of partitions.	-661
53037	A partitioned index cannot be created on a table in a non-partitioned tablespace.	-662
53038	The number of key limit values is zero or greater than the number of columns in the key.	-663
53039	The PARTITION clause of the ALTER statement is omitted or invalid.	-665
53040	The buffer pool cannot be changed as specified.	-671
53041	The page size of the buffer is invalid.	-676
53043	Columns with different field procedures cannot be compared.	-686
53044	The columns have a field procedure, but the field types are not compatible.	-687
53045	The data type of the key limit constant is not the same as the data type of the column.	-678
53046	The index space is not valid.	

Table 36. Class Code 53: Invalid Operand or Inconsistent Specification (continued)

SQLSTATE Value	Meaning	SQLCODE Values
53088	LOCKMAX is inconsistent with the specified LOCKSIZE.	-611
53089	The number of host variable parameters for a stored procedure is not equal to the number of expected host variable parameters.	-2001
53090	Only data from one encoding scheme, either ASCII, EBCDIC, or Unicode can be referenced in the same SQL statement.	-873
53091	The encoding scheme specified is not the same as the encoding scheme currently in use for the containing tablespace.	-874
53092	Type 1 index cannot be created for a table using the ASCII encoding scheme.	-876
53093	The CCSID ASCII or UNICODE clause is not supported for this database or table space.	-877
53094	The PLAN_TABLE cannot be created with the FOR ASCII clause.	-878
53095	CREATE or ALTER statement cannot define an object with the specified encoding scheme.	-879
53096	The PARTITION clause was specified on CREATE AUXILIARY TABLE, but the base table is not partitioned.	-769
53097	LOBs cannot be specified as parameters when the NO WLM ENVIRONMENT is specified.	
53098	The auxiliary table cannot be created because a column was specified that is not a LOB column.	-20070
53099	A WLM ENVIRONMENT name must be specified on the CREATE FUNCTION statement.	-20171
530A1	An ALTER TABLE statement specified FLOAT as the new data type for a column, but there is an existing index or constraint that restricts the use of FLOAT.	-20177
530A2	The VALUES clause is not allowed on the specified index.	-20182
530A3	The specified ALTER PROCEDURE option is not allowed for the type of routine specified.	-4705
530A4	The options specified on ALTER PROCEDURE are not the same as those specified when the procedure was created.	-4706
530A5	The REGENERATE option is only valid for an index with key expressions	-20381
530A7	EXCHANGE DATA is not allowed because the tables do not have a defined clone relationship.	-4710

Table 37. Class Code 54: SQL or Product Limit Exceeded

SQLSTATE Value	Meaning	SQLCODE Values
54001	The statement is too long or too complex.	-101
54002	A string constant is too long.	-102
54004	The statement has too many table names or too many items in a SELECT or INSERT list.	-129, -840
54005	The sort key is too long, or has too many columns.	-136
54006	The result string is too long.	-137

Table 37. Class Code 54: SQL or Product Limit Exceeded (continued)

SQLSTATE Value	Meaning	SQLCODE Values
54008	The key is too long, a column of the key is too long, or the key many columns.	-602, -613, -614, -631
54010	The record length of the table is too long.	-670
54011	Too many columns were specified for a table, view, or table function.	-680, -689
54012	The literal is too long.	-684
54021	Too many constraints, or the size of the constraint is too large.	
54024	The check constraint, generated column, or key expression is too long.	-643
54025	The table description exceeds the maximum size of the object descriptor.	-651
54027	The catalog has the maximum number of user-defined indexes.	-400
54035	An internal object limit exceeded.	-20005
54038	Maximum depth of nested routines or triggers was exceeded.	-724
54041	The maximum number of internal identifiers has been reached.	-497
54042	Only one index is allowed on an auxiliary table.	-748
54051	Value specified on FETCH ABSOLUTE or RELATIVE is invalid.	-20127
54054	The number of parttions, or the combination of the number of table space partitions and the corresponding length of the partitioning limit key is exceeded.	-4701
54055	The maximum number of versions has been reached for a table or index.	-4702
54058	The internal representation of an XML path is too long.	-20327
54065	The maximum of 99999 implicitly generated object names has been exceeded.	-4711

Table 38. Class Code 55: Object Not in Prerequisite State

SQLSTATE Value	Meaning	SQLCODE Values
55002	The explanation table is not defined properly.	-220, -221
55003	The DDL registration table is not defined properly.	-693
55004	The database cannot be accessed, because it is no longer a shared database.	+735
55006	The object cannot be dropped, because it is currently in use by the same application process.	-615
55007	The object cannot be altered, because it is currently in use by the same application process.	-951, - 20366
55011	The operation is disallowed, because the workfile database is not in the stopped state.	-619
55012	A clustering index already exists on the table.	-623
55014	The table does not have an index to enforce the uniqueness of the primary key.	-625
55015	The ALTER statement cannot be executed, because the pageset is not in the stopped state.	-626

Table 38. Class Code 55: Object Not in Prerequisite State (continued)

SQLSTATE Value	Meaning	SQLCODE Values
55016	The ALTER statement is invalid, because the pageset has user-managed data sets.	-627
55017	The table cannot be created in the table space, because it already contains a table.	-646
55019	The object is in an invalid state for the operation.	- 7008
55020	A work file database is already defined for the member.	-741
55023	An error occurred calling a procedure.	-471
55030	A package specified in a remote BIND REPLACE operation must not have a system list.	-726
55035	The table cannot be dropped, because it is protected.	-672
55048	Encrypted data cannot be encrypted.	-20147
55058	The DEBUG MODE cannot be changed for a routine that was created with DISABLE DEBUG MODE.	-20313
55059	The currently active version for a routine cannot be dropped.	-20315
55063	The XML schema is not in the correct state for the operation.	-20339

Table 39. Class Code 56: Miscellaneous SQL or Product Error

SQLSTATE Value	Meaning	SQLCODE Values
56010	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.	-333
56016	The ranges specified for data partitions are not valid.	-636
56018	A column cannot be added to the table, because it has an edit procedure.	-668
56023	An invalid reference to a remote object has been detected.	-512
56025	An invalid use of AT ALL LOCATIONS in GRANT or REVOKE has been detected.	-558
56027	A nullable column of a foreign key with a delete rule of SET NULL cannot be part of the key of a partitioned index.	-639
56031	The clause or scalar function is invalid, because mixed and DBCS data are not supported on this system.	-622
56036	Specific and non-specific volume IDs are not allowed in a storage group.	-655
56038	The requested feature is not supported in this environment.	-947, -4700, -4708
56040	CURRENT SQLID cannot be used in a statement that references remote objects.	-411
56045	The application must issue a rollback operation to back out the change that was made at the read-only application server.	-919
56052	The remote requester tried to bind, rebind, or free a trigger package.	-20072
56053	The parent of a table in a read-only shared database must also be a table in a read-only shared database.	-730
56054	User-defined datasets for objects in a shared database must be defined with SHAREOPTIONS(1,3).	-731

Table 39. Class Code 56: Miscellaneous SQL or Product Error (continued)

SQLSTATE Value	Meaning	SQLCODE Values
56055	The database is defined as SHARE READ, but the table space or index space has not been defined on the owning system.	-732
56056	The description of an object in a SHARE READ database must be consistent with its description in the OWNER system.	-733, -737
56057	A database cannot be altered from SHARE READ to SHARE OWNER.	-734
56059	An error occurred when binding a triggered SQL statement.	-20100
56060	An LE function failed.	-20101
56062	A distributed operation is invalid, because the unit of work was started before DDF.	-948
56064	The bind operation is disallowed, because the program depends on functions of a release from which fallback has occurred.	-715
56065	The bind operation is disallowed, because the DBRM has been modified or was created for a different release.	-716
56066	The rebind operation is disallowed, because the plan or package depends on functions of a release from which fallback has occurred.	-717
56067	The rebind operation is disallowed, because the value of SYSPACKAGE.IBMREQD is invalid.	-718
56072	Execution failed due to the function not supported by a downlevel server that will not affect the execution of subsequent SQL statements.	-30005
56073	Execution failed due to the function not supported by a downlevel server that will affect the execution of subsequent SQL statements.	-30025
56080	The data type is not allowed in DB2 private protocol processing.	-728
56082	The statement cannot be executed, because it identifies a DB2 system that does not support character conversion.	
56084	An unsupported SQLTYPE was encountered in a select list or input list.	-351, -352, -7404, -20108
56088	ALTER FUNCTION failed because functions cannot modify data when they are processed in parallel.	-739
56089	Specified option requires type 2 indexes.	-640
56090	The type of the index cannot be changed.	-650
56095	A bind option is invalid.	-30104
56096	Bind options are incompatible.	-30105
560A1	The tables pace name is not valid.	-763
560A2	A LOB table and its associated base table space must be in the same database.	-764
560A3	The table is not compatible with the database.	-765
560A4	The operation is not allowed on an auxiliary table.	-766
560A5	An auxiliary table already exists for the specified column or partition.	-768
560A6	A table cannot have a LOB column unless it also has a ROWID column or cannot have an XML column unless it also has a DOCID..	-770
560A7	GBPCACHE NONE cannot be specified for a table space or index in GRECP.	-20003
560A8	An 8K or 16K bufferpool pagesize is invalid for a WORKFILE object.	-20004
560A9	An unsupported option was specified.	-20008

Table 39. Class Code 56: Miscellaneous SQL or Product Error (continued)

SQLSTATE Value	Meaning	SQLCODE Values
560AB	The data type is not supported in an SQL routine.	-20060
560AD	A view name was specified after LIKE in addition to the INCLUDING IDENTITY COLUMN ATTRIBUTES clause.	-20091
560AE	The specified table or view is not allowed in a LIKE clause.	-20092
560B1	Procedure failed because a result set was scrollable but the cursor was not positioned before the first row.	-20123
560B2	Open failed because the cursor is scrollable but the client does not support scrollable cursors.	-20124
560B3	Procedure failed because one or more result sets returned by the procedure are scrollable but the client does not support scrollable cursors.	-20125
560B5	Local special register is not valid as used.	-20129
560B8	The SQL statement cannot be executed because it was precompiled at a level that is incompatible with the current value of the ENCODING bind option or special register.	-20210
560B9	Hexadecimal constant GX is not allowed.	-20163
560BF	The encryption and decryption facility has not been installed.	-20223
560C3	An AFTER trigger cannot modify a row being inserted for an INSERT statement.	-989
560C5	The package must be rebound to be successfully executed.	-20249
560C6	A referential constraint cannot modify a row that was modified by an SQL data change statement within a fullselect.	-864
560C7	ALTER VIEW failed.	-20266
560CC	ALTER INDEX failed.	-20380
560CG	An XML value contains a combination of XML nodes that causes an internal identifier limit to be exceeded.	-20409
560CG	The maximum number of children nodes for an XML node in an XML value is exceeded.	-20410
560CK	Explain monitored statements failed.	-4709

Table 40. Class Code 57: Resource Not Available or Operator Intervention

SQLSTATE Value	Meaning	SQLCODE Values
57001	The table is unavailable, because it does not have a primary index.	-540
57002	GRANT and REVOKE are invalid, because authorization has been disabled.	-559
57003	The specified bufferpool has not been activated.	-647
57004	The table is unavailable, because it lacks a partitioned index.	-653
57005	The statement cannot be executed, because a utility or a governor time limit was exceeded.	-666
57006	The object cannot be created, because a DROP or CREATE is pending.	-679
57007	The object cannot be used, because an operation is pending.	-910, - 909, -910
57008	The date or time local format exit has not been installed.	-185
57010	A field procedure could not be loaded.	-682

Table 40. Class Code 57: Resource Not Available or Operator Intervention (continued)

SQLSTATE Value	Meaning	SQLCODE Values
57011	Virtual storage or database resource is not available.	-677, -904
57012	A non-database resource is not available. This will not affect the successful execution of subsequent statements.	-30040
57013	A non-database resource is not available. This will affect the successful execution of subsequent statements.	-30041
57014	Processing was canceled as requested.	-905, -952
57015	Connection to the local DB2 not established.	-923, -981, -991
57017	Character conversion is not defined.	-332, -20232
57018	A DDL registration table or its unique index does not exist.	-691, -692
57023	The DDL statement cannot be executed, because a DROP is pending of a DDL registration table.	-694
57033	Deadlock or timeout occurred without automatic rollback.	-913
57051	The estimated CPU cost exceeds the resource limit.	-495
57053	A table is not available in a routine or trigger because of violated nested SQL statement rules.	-746
57054	A table is not available until the auxiliary tables and indexes for its externally stored columns have been created.	-747
57057	The SQL statement cannot be executed due to a prior condition in a DRDA chain of SQL statements.	-30002

Table 41. Class Code 58: System Error

SQLSTATE Value	Meaning	SQLCODE Values
58001	The database cannot be created, because the assigned DBID is a duplicate.	-621
58002	An exit has returned an error or invalid data.	-685, -688, -929
58003	An invalid section number was detected.	-144
58004	A system error (that does not necessarily preclude the successful execution of subsequent SQL statements) occurred.	-819, -820, -901
58006	A system error occurred during connection.	-924
58005	A system error (that prevents the successful execution of subsequent SQL statements) occurred.	
58008	Execution failed due to a distribution protocol error that will not affect the successful execution of subsequent DDM commands or SQL statements.	-30000
58009	Execution failed due to a distribution protocol error that caused deallocation of the conversation.	-30020
58010	Execution failed due to a distribution protocol error that will affect the successful execution of subsequent DDM commands or SQL statements.	-30021
58011	The DDM command is invalid while the bind process in progress.	-30050
58012	The bind process with the specified package name and consistency token is not active.	-30051
58013	The SQLCODE is inconsistent with the reply message.	-30030
58014	The DDM command is not supported.	-30070

Table 41. Class Code 58: System Error (continued)

SQLSTATE Value	Meaning	SQLCODE Values
58015	The DDM object is not supported.	-30071
58016	The DDM parameter is not supported.	-30072
58017	The DDM parameter value is not supported.	-30073
58018	The DDM reply message is not supported.	-30074
58026	The number of host variables in the statement is not equal to the number of host variables in SQLSTTVRB.	-870

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

X'04E' and X'04F' system abend completion codes identify internal errors encountered during DB2 operation, diagnostic information for problem determination, and subsystem actions initiated by the DB2 subcomponent involved in the error.

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.

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.

The following table 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 Appendix C, "z/OS diagnostic services," on page 849

Table 42. Abend completion codes

	X'04E'	X'04F'
Explanation	Error during DB2 normal operation	Severe error; continued operation may jeopardize data integrity
System action	• Internal DB2 task is abended • Connected user task is abended	• The entire DB2 subsystem is abended • User task with an active DB2 connection may be abnormally terminated with an X'04F' • Possible MEMTERM (memory termination) of connected allied address space
Diagnostic information	• SVC dump • SYS1.LOGREC entries • VRA data entries	• SYS1.LOGREC entries • VRA data entries
Associated reason codes	• DB2 abend reason code • Associated MVS system codes	• Subsystem termination reason code • MVS system completion codes and X'04E' codes that precede the X'04F' abend

Table 42. Abend completion codes (continued)

	X'04E'	X'04F'
Location of accompanying codes	• SVC dump title • Message DSNW050I • Register 15 of SDWA section "General Purpose Registers at Time of Error" • SYS1.LOGREC entries • VRA data entries	• SYS1.LOGREC entries • VRA data entries • Message DSNV086E, which is sent to MVS system operator

Appendix F. Resource types

Type codes are associated with particular types of resources.

The following table describes the type of resource associated with the type codes. The abbreviations in the "Name, Content, Format" column are explained in Table 44 on page 886.

Table 43. Resource Types

TYPE Code	Type of Resource	Name, Content, Format
00000100	Database	DB
00000200	Table space	DB.SP
00000201	Index space	DB.SP
00000202	Table space	RD.DB.TS
00000205	Compression Dictionary	DB.SP
00000210	Partition	DB.SP.PT
00000220	Data set	DSN
00000230	Temporary file	SZ
00000240	Database procedure	DBP
00000300	Page	DB.SP.PG
00000301	Index minipage	DB.SP.PG.MP
00000302	Table space page	DB.SP.PG
00000303	Index space page	DB.SP.PG
00000304	Table space RID	DB.SP.RID
00000305	Index access/table space RID	DB.SP.RID
00000306	Index access/table space page	DB.SP.PG
00000307	Index space EOF	DB.SP.01
00000400	ICF catalog	IC
00000401	Authorization function	
00000402	Security Server	SAF/RACF return/reason codes
00000500	Storage group	SG
00000600	EDM pool space	
00000602	EDM DBD Space	
00000603	EDM DYNAMIC STATEMENT Space	
00000700	Buffer pool space	BP
00000701	Group buffer pool	GBP
00000800	Plan	PL
00000801	Package	COLLECTION. PACKAGE. CONTOKEN

Table 43. Resource Types (continued)

TYPE Code	Type of Resource	Name, Content, Format
00000802	BINDLOCK01 through BINDLOCK20	BINDLOCK01 through BINDLOCK20
00000900	32KB data area	
00000901	Sort storage	
00000903	Hash anchor	DB.SP.PG.AI
00000904	RIDLIST storage	
00000905	IRLM storage	
00000906	DB2	MEMBER
00000907	LOB storage	
00000908	Basic Floating Point Extensions Facility	
00000909	Extended Time-of-Day (TOD) Clock	
0000090A	XML storage	
00000A00	Table	RD.CR.TB
00000A10	Alias	RELDEP. OWNER. ALIAS. RD.CR.AL
00000A11	Distinct type	SC.DT
00000A12	User-defined function	SC.SN
00000A13	Stored procedure	SC.SN
00000A14	Sequence	
00000B00	View	RD.CR.VW
00000C00	Index	RD.CR.IX
00000C01	Index	CR.IX
00000D00	DBID/OBID	RD.DI.OI
00000D01	DBID/OBID	DI.OI
00000D02	OBID	OI
00000E00	SU limit exceeded	CN
00000F00	Auxiliary column	DI.OI. ROWID. COLN or DI.OI. DOCID. COLN
00000F01	LOB lock	DIX.PIX. ROWID. VRSN
00000F81	XML lock	DIX.PIX. DOCID
00001000	DDF	LOCATION or SUBSYSTEM ID
00001001	System conversation	LU.MODE. RTNCD. FDBK2. RCPRI. RCSEC. SENSE
00001002	Agent conversation	LU.MODE. RTNCD. FDBK2. RCPRI. RCSEC. SENSE

Table 43. Resource Types (continued)

TYPE Code	Type of Resource	Name, Content, Format
00001003	CNOS processing	LU. MODE. RTNCD. FDBK2. RCPRI. RCSEC. SENSE
00001004	CDB (Communication database)	LOCATION. AUTHORIZATION ID. PL
00001005	DB access agent	LOCATION
00001007	TCP/IP domain name	LINKNAME. DOMAIN. ERRNO
00001008	TCP/IP service name	LOCATION. SERVICE. ERRNO
00001102	Bootstrap data set (BSDS)	MEMBER
00002000	Table space CS-claim class	DB.SP
00002001	Table space RR-claim class	DB.SP
00002002	Table space write-claim class	DB.SP
00002003	Index space CS-claim class	DB.SP
00002004	Index space RR-claim class	DB.SP
00002005	Index space write-claim class	DB.SP
00002006	Table space partition CS-claim class	DB.SP.PT
00002007	Table space partition RR-claim class	DB.SP.PT
00002008	Table space partition write-claim class	DB.SP.PT
00002009	Index space partition CS-claim class	DB.SP.PT
00002010	Index space partition RR-claim class	DB.SP.PT
00002011	Index space partition Write-claim class	DB.SP.PT
00002100	Table space DBET entry	DB.SP
00002101	Index space DBET entry	DB.SP
00002102	Table space partition DBET entry	DB.SP.PT
00002103	Index space partition DBET entry	DB.SP.PT
00002104	DBET hash chain lock timeout	INTERNAL LOCK NN
00002105	Logical partition DBET entry	DB.SP.PT
00002200	Routine Parameter Storage	DBP
00002201	Debug Agent Storage	DBP
00002300	ICSF encryption and decryption facilities	
00003000	Code (release maintenance_level or system parameter)	REL, APAR, ZPARM
00003002	Number of Stored Procedures	
00003072	Index	
00003073	Index	
00003328	Release dependency	
00003329		
00003330	OBID limit exceeded	

Table 43. Resource Types (continued)

TYPE Code	Type of Resource	Name, Content, Format
00003840	LOB column	

The following table contains the definitions for the acronyms provided for the "Name, Content, Format" column of the preceding table, Table 43 on page 883.

Table 44. Definitions for resource type name, content, and format

Where	Stands for
AI	Hash anchor ID
ALIAS	Alias owner
APAR	APAR number
AUTHORIZATION ID	DB2 authorization identifier
BP	Buffer pool identifier
CN	Column name
COLLECTION	Collection-ID of the package
COLN	Column number within the base table of the LOB column that has been marked invalid.
CONTOKEN	Consistency token of the package
CR	Creator of the object
DB[1]	Database name
DBP	Database procedure name
DI	DBID in decimal of resource
DIX	DBID in hexadecimal
DSN	Data set name
FDBK2	VTAM secondary return code
GBP	Group buffer pool name
IC	ICF catalog alias name
IX	Index name
LOCATION	Location in which the specified resource is not available
LU	Logical unit name
MEMBER	Group member name
MODE	Logical unit mode name
MP	Hexadecimal mini-page number
NN	Decimal number of the hash chain
OI	OBID in decimal of resource
OWNER	Alias owner
PACKAGE	Package identifier
PG	Hexadecimal page number
PIX	PSID in hexadecimal
PL	Plan identifier
PT	Decimal partition number

Table 44. Definitions for resource type name, content, and format (continued)

Where	Stands for
RCPRI	APPC primary return code
RCSEC	APPC secondary return code
RD²	DB2 release dependency mark
REL	DB2 release name
RELDEP	DB2 release dependency mark
RID	Record Identifier
RTNCD	VTAM primary return code
SENSE	SNA sense codename
SG	Storage group name
SP	Space name
SZ	Temporary file page size
TB	Table name
TS	Table space name
VW	View name

Notes:

1. DB can also refer to DI. SP, TS, and TB can also refer to OI. DB2 sometimes does not have access to resource names, and uses DBID or OBID instead.

2. RD can be represented as a white space or blank to indicate no release dependency, or Y or N to indicate whether it is IBMREQD.

Appendix G. ABEND codes associated with DSN1COPY misuse

Several of the 00C9... codes are frequently associated with improper use of the DSN1COPY utility.

The following tables represent the possible combinations of ABEND reason codes, CSECT-names, and ERQUAL values that can result from the improper use of DSN1COPY. Improper use includes, but is not limited to:

- Specifying the wrong OBIDXLAT values
- Not restoring all the data sets of the table space or index space to the same level
- Restoring data sets to a level that does not match the definition in the catalog and directory
- Restoring one table space type to a different type, such as segmented to simple

These tables are 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 in each Explanation column refer to the notes that follow the last table.

Table 45. ABEND reason code 00C90101

CSECT-name: ERQUAL	Explanation
DSNICKEY:5005	8 on page 893
DSNICKEY:5006	8 on page 893
DSNICSEL:5003	1 on page 893
DSNICSEL:5008	3 on page 893
DSNICUMW:5004	4 on page 893
DSNICUMW:5005	2 on page 893
DSNIDEFR:5005	13 on page 894
DSNIDLOD:501B	6 on page 893
DSNIIMSI:5006	3 on page 893
DSNIIMSI:5008	3 on page 893
DSNIIMSI:500A	3 on page 893
DSNIISF:5001	3 on page 893
DSNILPG:5013	6 on page 893
DSNIMOFR:500B	1 on page 893
DSNIMOFR:500C	1 on page 893
DSNIMRST:5001	1 on page 893
DSNIMRST:5002	1 on page 893
DSNIMRST:5003	1 on page 893
DSNIMSMS:5004	2 on page 893
DSNINXTP:5008	6 on page 893
DSNIOSEL:5002	2 on page 893

Table 45. ABEND reason code 00C90101 (continued)

CSECT-name: ERQUAL	Explanation
DSNIOSEL:5003	2 on page 893
DSNIOSEL:53DD	3 on page 893
DSNIOSEL:53DE	3 on page 893
DSNIPOCR:5005	2 on page 893
DSNIPOCR:5007	2 on page 893
DSNIPOCR:5009	2 on page 893
DSNIPOCR:500B	2 on page 893
DSNIPOCR:500D	2 on page 893
DSNIPOCR:500F	2 on page 893
DSNIPTYM:5006	6 on page 893
DSNIRECU:5002	2 on page 893
DSNIREDR:5007	1 on page 893
DSNIREDR:5008	1 on page 893
DSNIREDR:5009	1 on page 893
DSNIRELF:5011	2 on page 893
DSNIRELK:5001	1 on page 893
DSNIRLPG:500B	2 on page 893
DSNIRLPG:500C	1 on page 893
DSNIRLPG:5011	2 on page 893
DSNIRNXT:53D3	3 on page 893
DSNIRNXT:53DD	3 on page 893
DSNIRNXT:53DE	3 on page 893
DSNISEGD:5002	2 on page 893
DSNISEGD:5005	6 on page 893
DSNISEGF:5002	2 on page 893
DSNISEGR:500A	6 on page 893
DSNISEGR:500C	2 on page 893
DSNISEL:5006	1 on page 893
DSNISEL:5007	1 on page 893
DSNISEL:500A	3 on page 893
DSNISEL:500D	3 on page 893
DSNISESE:5001	1 on page 893
DSNISESE:5002	1 on page 893
DSNISESE:5003	1 on page 893
DSNISESR:5001	2 on page 893
DSNISESR:5002	1 on page 893
DSNISESR:5004	1 on page 893
DSNISESR:5005	1 on page 893
DSNISFS:53DD	3 on page 893
DSNISFS:53DE	3 on page 893

Table 45. ABEND reason code 00C90101 (continued)

CSECT-name: ERQUAL	Explanation
DSNISFX:5008	2 on page 893
DSNISGNS:5003	2 on page 893
DSNISGNS:5004	2 on page 893
DSNISGSS:5001	1 on page 893
DSNISMRS:5001	1 on page 893
DSNISRID:53DD	3 on page 893
DSNISRID:53DE	3 on page 893
DSNISRTI:5004	1 on page 893
DSNIWLPG:5003	6 on page 893
DSNKCKIS:5003	11 on page 893
DSNKFIND:5001	11 on page 893
DSNKFPNT:5003	12 on page 893
DSNKLVLN:5006	11 on page 893
DSNKLVLN:5007	11 on page 893
DSNKMDLE:5005	10 on page 893
DSNKMDLE:5007	10 on page 893
DSNKNEXT:5001	11 on page 893
DSNKNEXT:5004	11 on page 893
DSNKPOCI:5004	11 on page 893

Table 46. ABEND reason code 00C90105

CSECT-name: ERQUAL	Explanation
DSNIBROK:0CA4	6 on page 893

Table 47. ABEND reason code 00C90206

CSECT-name: ERQUAL	Explanation
DSNIIDIS:5002	4 on page 893

Table 48. ABEND reason code 00C90210

CSECT-name: ERQUAL	Explanation
DSNKFIND:5002	11 on page 893
DSNKFIND:5005	11 on page 893
DSNKFIND:500B	11 on page 893

Table 49. ABEND reason code 00C90212

CSECT-name: ERQUAL	Explanation
DSNKDNEX:5005	11 on page 893

Table 50. ABEND reason code 00C90213

CSECT-name: ERQUAL	Explanation
DSNIRSET:500C	2 on page 893

Table 51. ABEND reason code 00C90214

CSECT-name: ERQUAL	Explanation
DSNKISRT:5005	8 on page 893
DSNKISRT:5006	11 on page 893
DSNKLOD:500F	8 on page 893
DSNKLOD:5011	11 on page 893

Table 52. ABEND reason code 00C90215

CSECT-name: ERQUAL	Explanation
DSNKFIND:5006	9 on page 893
DSNKFIND:5007	9 on page 893

Table 53. ABEND reason code 00C90216

CSECT-name: ERQUAL	Explanation
DSNIRFNX:5008	1 on page 893

Table 54. ABEND reason code 00C90218

CSECT-name: ERQUAL	Explanation
DSNIDLOD:5014	6 on page 893
DSNISEGD:5007	6 on page 893
DSNISGSC:5001	6 on page 893
DSNISNPG:5004	6 on page 893

Table 55. ABEND reason code 00C90219

CSECT-name: ERQUAL	Explanation
DSNIDLOD:5015	2 on page 893
DSNISEGD:5008	2 on page 893
DSNISGSC:5002	2 on page 893
DSNISNPG:5005	2 on page 893

Table 56. ABEND reason code 00C9021A

CSECT-name: ERQUAL	Explanation
DSNIRFNX:500A	2 on page 893
DSNIRFNX:500B	2 on page 893
DSNISFS:5007	2 on page 893
DSNISFS:5008	2 on page 893

Table 57. ABEND reason code 00C9021C

CSECT-name: ERQUAL	Explanation
DSNIRFNX:5006	6 on page 893
DSNISNPG:5007	6 on page 893

Table 58. ABEND reason code 00C90221

CSECT-name: ERQUAL	Explanation
DSNISGAU:5007	6

Notes

The following explanations are groups of inconsistencies that relate to the ABEND codes. Items 1 through 7 apply to user table spaces. Items 8 through 13 apply to index spaces. Within each group are examples of specific inconsistencies representing each group.

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 data sets are restored to the same level.
   - Broken segment chains.
   - Base and overflow records are not consistent.
8. 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.
9. 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.
10. 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.
11. 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.
12. Index space is inconsistent within itself:
    - Not all data sets are restored to the same level.

- Index entry not connected to the root page.

13. Log RBA is unavailable for the associated table space or index space.

Information resources for DB2 for z/OS and related products

Many information resources are available to help you use DB2 for z/OS and many related products. A large amount of technical information about IBM products is now available online in information centers or on library Web sites.

Disclaimer: Any Web addresses that are included here are accurate at the time this information is being published. However, Web addresses sometimes change. If you visit a Web address that is listed here but that is no longer valid, you can try to find the current Web address for the product information that you are looking for at either of the following sites:

- http://www.ibm.com/support/publications/us/library/index.shtml, which lists the IBM information centers that are available for various IBM products
- http://www.elink.ibmlink.ibm.com/public/applications/publications/cgibin/pbi.cgi, which is the IBM Publications Center, where you can download online PDF books or order printed books for various IBM products

DB2 for z/OS product information

The primary place to find and use information about DB2 for z/OS is the Information Management Software for z/OS Solutions Information Center (http://publib.boulder.ibm.com/infocenter/imzic), which also contains information about IMS, QMF™, and many DB2 and IMS Tools products. This information center is also available as an installable information center that can run on a local system or on an intranet server. You can order the Information Management for z/OS Solutions Information Center DVD (SK5T-7377) for a low cost from the IBM Publications Center (www.ibm.com/shop/publications/order).

The majority of the DB2 for z/OS information in this information center is also available in the books that are identified in the following table. You can access these books at the DB2 for z/OS library Web site (http://www.ibm.com/software/data/db2/zos/library.html) or at the IBM Publications Center (http://www.ibm.com/shop/publications/order).

Table 59. DB2 Version 9.1 for z/OS book titles

Title	Publication number	Available in information center	Available in PDF	Available in BookManager® format	Available in printed book
DB2 Version 9.1 for z/OS Administration Guide	SC18-9840	X	X	X	X
DB2 Version 9.1 for z/OS Application Programming & SQL Guide	SC18-9841	X	X	X	X
DB2 Version 9.1 for z/OS Application Programming Guide and Reference for Java	SC18-9842	X	X	X	X
DB2 Version 9.1 for z/OS Codes	GC18-9843	X	X	X	X
DB2 Version 9.1 for z/OS Command Reference	SC18-9844	X	X	X	X
DB2 Version 9.1 for z/OS Data Sharing: Planning and Administration	SC18-9845	X	X	X	X

Table 59. DB2 Version 9.1 for z/OS book titles (continued)

Title	Publication number	Available in information center	Available in PDF	Available in BookManager® format	Available in printed book
DB2 Version 9.1 for z/OS Diagnosis Guide and Reference [1]	LY37-3218		X	X	X
DB2 Version 9.1 for z/OS Diagnostic Quick Reference	LY37-3219				X
DB2 Version 9.1 for z/OS Installation Guide	GC18-9846	X	X	X	X
DB2 Version 9.1 for z/OS Introduction to DB2	SC18-9847	X	X	X	X
DB2 Version 9.1 for z/OS Licensed Program Specifications	GC18-9848		X		X
DB2 Version 9.1 for z/OS Messages	GC18-9849	X	X	X	X
DB2 Version 9.1 for z/OS ODBC Guide and Reference	SC18-9850	X	X	X	X
DB2 Version 9.1 for z/OS Performance Monitoring and Tuning Guide	SC18-9851	X	X	X	X
DB2 Version 9.1 for z/OS Optimization Service Center		X			
DB2 Version 9.1 for z/OS Program Directory	GI10-8737		X		X
DB2 Version 9.1 for z/OS RACF Access Control Module Guide	SC18-9852	X	X	X	
DB2 Version 9.1 for z/OS Reference for Remote DRDA Requesters and Servers	SC18-9853	X	X	X	
DB2 Version 9.1 for z/OS Reference Summary	SX26-3854		X		
DB2 Version 9.1 for z/OS SQL Reference	SC18-9854	X	X	X	X
DB2 Version 9.1 for z/OS Utility Guide and Reference	SC18-9855	X	X	X	X
DB2 Version 9.1 for z/OS What's New?	GC18-9856	X	X		X
DB2 Version 9.1 for z/OS XML Extender Administration and Programming	SC18-9857	X	X	X	X
DB2 Version 9.1 for z/OS XML Guide	SC18-9858	X	X	X	X
IRLM Messages and Codes for IMS and DB2 for z/OS	GC19-2666	X	X	X	

Note:

1. *DB2 Version 9.1 for z/OS Diagnosis Guide and Reference* is available in PDF and BookManager formats on the DB2 Version 9.1 for z/OS Licensed Collection kit, LK3T-7195. You can order this License Collection kit on the IBM Publications Center site (http://www.elink.ibmlink.ibm.com/public/applications/publications/cgibin/pbi.cgi). This book is also available in online format in DB2 data set DSN910.SDSNIVPD(DSNDR).

Information resources for related products

In the following table, related product names are listed in alphabetic order, and the associated Web addresses of product information centers or library Web pages are indicated.

Table 60. Related product information resource locations

Related product	Information resources
C/C++ for z/OS	Library Web site: http://www.ibm.com/software/awdtools/czos/library/ This product is now called z/OS XL C/C++.
CICS Transaction Server for z/OS	Information center: http://publib.boulder.ibm.com/infocenter/cicsts/v3r1/index.jsp
COBOL	Information center: http://publib.boulder.ibm.com/infocenter/pdthelp/v1r1/index.jsp This product is now called Enterprise COBOL for z/OS.
DB2 Connect	Information center: http://publib.boulder.ibm.com/infocenter/db2luw/v9/index.jsp This resource is for DB2 Connect 9.
DB2 Database for Linux, UNIX, and Windows	Information center: http://publib.boulder.ibm.com/infocenter/db2luw/v9/index.jsp This resource is for DB2 9 for Linux, UNIX, and Windows.
DB2 Query Management Facility	Information center: http://publib.boulder.ibm.com/infocenter/imzic
DB2 Server for VSE & VM	One of the following locations: • For VSE: http://www.ibm.com/support/docview.wss?rs=66&uid=swg27003758 • For VM: http://www.ibm.com/support/docview.wss?rs=66&uid=swg27003759
DB2 Tools	One of the following locations: • Information center: http://publib.boulder.ibm.com/infocenter/imzic • Library Web site: http://www.ibm.com/software/data/db2imstools/library.html These resources include information about the following products and others: • DB2 Administration Tool • DB2 Automation Tool • DB2 Log Analysis Tool • DB2 Object Restore Tool • DB2 Query Management Facility • DB2 SQL Performance Analyzer
DB2 Universal Database™ for iSeries	Information center: http://www.ibm.com/systems/i/infocenter/
Debug Tool for z/OS	Information center: http://publib.boulder.ibm.com/infocenter/pdthelp/v1r1/index.jsp
Enterprise COBOL for z/OS	Information center: http://publib.boulder.ibm.com/infocenter/pdthelp/v1r1/index.jsp
Enterprise PL/I for z/OS	Information center: http://publib.boulder.ibm.com/infocenter/pdthelp/v1r1/index.jsp
IMS	Information center: http://publib.boulder.ibm.com/infocenter/imzic

Table 60. Related product information resource locations (continued)

Related product	Information resources
IMS Tools	One of the following locations: • Information center: http://publib.boulder.ibm.com/infocenter/imzic • Library Web site: http://www.ibm.com/software/data/db2imstools/library.html These resources have information about the following products and others: • IMS Batch Terminal Simulator for z/OS • IMS Connect • IMS HALDB Conversion and Maintenance Aid • IMS High Performance Utility products • IMS DataPropagator • IMS Online Reorganization Facility • IMS Performance Analyzer
Integrated Data Management products	Information center: http://publib.boulder.ibm.com/infocenter/idm/v2r2/index.jsp This information center has information about the following products and others: • IBM Data Studio • InfoSphere™ Data Architect • InfoSphere Warehouse • Optim™ Database Administrator • Optim Development Studio • Optim Query Tuner
PL/I	Information center: http://publib.boulder.ibm.com/infocenter/pdthelp/v1r1/index.jsp This product is now called Enterprise PL/I for z/OS.
System z	http://publib.boulder.ibm.com/infocenter/eserver/v1r2/index.jsp
Tivoli OMEGAMONXE for DB2 Performance Expert on z/OS	Information center: http://publib.boulder.ibm.com/infocenter/tivihelp/v15r1/index.jsp?topic=/com.ibm.ko2pe.doc/ko2welcome.htm In earlier releases, this product was called DB2 Performance Expert for z/OS.
WebSphere Application Server	Information center: http://publib.boulder.ibm.com/infocenter/wasinfo/v6r0/index.jsp
WebSphere Message Broker with Rules and Formatter Extension	Information center: http://publib.boulder.ibm.com/infocenter/wmbhelp/v6r0m0/index.jsp The product is also known as WebSphere MQ Integrator Broker.
WebSphere MQ	Information center: http://publib.boulder.ibm.com/infocenter/wmqv6/v6r0/index.jsp The resource includes information about MQSeries.
WebSphere Replication Server for z/OS	Either of the following locations: • Information center: http://publib.boulder.ibm.com/infocenter/imzic • Library Web site: http://www.ibm.com/software/data/db2imstools/library.html This product is also known as DB2 DataPropagator.
z/Architecture	Library Center site: http://www.ibm.com/servers/eserver/zseries/zos/bkserv/

Table 60. Related product information resource locations (continued)

Related product	Information resources
z/OS	Library Center site: http://www.ibm.com/servers/eserver/zseries/zos/bkserv/ This resource includes information about the following z/OS elements and components: • Character Data Representation Architecture • Device Support Facilities • DFSORT • Fortran • High Level Assembler • NetView • SMP/E for z/OS • SNA • TCP/IP • TotalStorage® Enterprise Storage Server® • VTAM • z/OS C/C++ • z/OS Communications Server • z/OS DCE • z/OS DFSMS • z/OS DFSMS Access Method Services • z/OS DFSMSdss • z/OS DFSMShsm • z/OS DFSMSdfp • z/OS ICSF • z/OS ISPF • z/OS JES3 • z/OS Language Environment • z/OS Managed System Infrastructure • z/OS MVS • z/OS MVS JCL • z/OS Parallel Sysplex • z/OS RMF™ • z/OS Security Server • z/OS UNIX System Services
z/OS XL C/C++	http://www.ibm.com/software/awdtools/czos/library/

The following information resources from IBM are not necessarily specific to a single product:
• The DB2 for z/OS Information Roadmap; available at: http://www.ibm.com/software/data/db2/zos/roadmap.html
• DB2 Redbooks® and Redbooks about related products; available at: http://www.ibm.com/redbooks
• IBM Educational resources:
  – Information about IBM educational offerings is available on the Web at: http://www.ibm.com/software/sw-training/

- – A collection of glossaries of IBM terms in multiple languages is available on the IBM Terminology Web site at: http://www.ibm.com/software/ globalization/terminology/index.jsp
- National Language Support information; available at the IBM Publications Center at: http://www.elink.ibmlink.ibm.com/public/applications/publications/ cgibin/pbi.cgi
- *SQL Reference for Cross-Platform Development*; available at the following developerWorks® site: http://www.ibm.com/developerworks/db2/library/ techarticle/0206sqlref/0206sqlref.html

The following information resources are not published by IBM but can be useful to users of DB2 for z/OS and related products:

- Database design topics:
  - – *DB2 for z/OS and OS/390 Development for Performance Volume I*, by Gabrielle Wiorkowski, Gabrielle & Associates, ISBN 0-96684-605-2
  - – *DB2 for z/OS and OS/390 Development for Performance Volume II*, by Gabrielle Wiorkowski, Gabrielle & Associates, ISBN 0-96684-606-0
  - – *Handbook of Relational Database Design*, by C. Fleming and B. Von Halle, Addison Wesley, ISBN 0-20111-434-8
- Distributed Relational Database Architecture (DRDA) specifications; http://www.opengroup.org
- Domain Name System: *DNS and BIND*, Third Edition, Paul Albitz and Cricket Liu, O'Reilly, ISBN 0-59600-158-4
- Microsoft® Open Database Connectivity (ODBC) information; http://msdn.microsoft.com/library/
- Unicode information; http://www.unicode.org

How to obtain DB2 information

You can access the official information about the DB2 product in a number of
ways.
- "DB2 on the Web"
- "DB2 product information"
- "DB2 education" on page 902
- "How to order the DB2 library" on page 902

DB2 on the Web

Stay current with the latest information about DB2 by visiting the DB2 home page
on the Web:

www.ibm.com/software/db2zos

On the DB2 home page, you can find links to a wide variety of information
resources about DB2. You can read news items that keep you informed about the
latest enhancements to the product. Product announcements, press releases, fact
sheets, and technical articles help you plan and implement your database
management strategy.

DB2 product information

The official DB2 for z/OS information is available in various formats and delivery
methods. IBM provides mid-version updates to the information in the information
center and in softcopy updates that are available on the Web and on CD-ROM.

Information Management Software for z/OS Solutions Information Center
DB2 product information is viewable in the information center, which is
the primary delivery vehicle for information about DB2 for z/OS, IMS,
QMF, and related tools. This information center enables you to search
across related product information in multiple languages for data
management solutions for the z/OS environment and print individual
topics or sets of related topics. You can also access, download, and print
PDFs of the publications that are associated with the information center
topics. Product technical information is provided in a format that offers
more options and tools for accessing, integrating, and customizing
information resources. The information center is based on Eclipse open
source technology.

The Information Management Software for z/OS Solutions Information
Center is viewable at the following Web site:

http://publib.boulder.ibm.com/infocenter/imzic

CD-ROMs and DVD
Books for DB2 are available on a CD-ROM that is included with your
product shipment:
- DB2 V9.1 for z/OS Licensed Library Collection, LK3T-7195, in English

The CD-ROM contains the collection of books for DB2 V9.1 for z/OS in
PDF and BookManager formats. Periodically, IBM refreshes the books on
subsequent editions of this CD-ROM.

The books for DB2 for z/OS are also available on the following CD-ROM and DVD collection kits, which contain online books for many IBM products:

- IBM z/OS Software Products Collection , SK3T-4270, in English
- IBM z/OS Software Products DVD Collection , SK3T–4271, in English

PDF format

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

BookManager format

You can use online books on CD-ROM to read, search across books, print portions of the text, and make notes in these BookManager books. Using the IBM Softcopy Reader, appropriate IBM Library Readers, or the BookManager Read product, you can view these books in the z/OS, Windows, and VM environments. You can also view and search many of the DB2 BookManager books on the Web.

DB2 education

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

www.ibm.com/services/learning

IBM also offers classes at your location, at a time that suits your needs. IBM can customize courses to meet your exact requirements. For more information, including the current local schedule, contact your IBM representative.

How to order the DB2 library

To order books, visit the IBM Publication Center on the Web:

www.elink.ibmlink.ibm.com/public/applications/publications/cgibin/pbi.cgi

From the IBM Publication Center, you can go to the Publication Notification System (PNS). 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. 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.

You can also order DB2 publications and CD-ROMs from your IBM representative or the IBM branch office that serves your locality. If your location is 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 1-800-426-4968.

To order additional copies of licensed publications, specify the SOFTWARE option. To order additional publications or CD-ROMs, specify the PUBLICATIONS option.

Be prepared to give your customer number, the product number, and either the feature codes or order numbers that you want.

How to use the DB2 library

Titles of books in the library begin with DB2 Version 9.1 for z/OS. 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. The primary place to find and use information about DB2 for z/OS is the Information Management Software for z/OS Solutions Information Center (http://publib.boulder.ibm.com/infocenter/imzic).

If you are new to DB2 for z/OS, *Introduction to DB2 for z/OS* provides a comprehensive introduction to DB2 Version 9.1 for z/OS. Topics included in this book explain the basic concepts that are associated with relational database management systems in general, and with DB2 for z/OS in particular.

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 that are associated with DB2 are grouped into the following major categories.

Installation

If you are involved with installing DB2, you will need to use a variety of resources, such as:
- *DB2 Program Directory*
- *DB2 Installation Guide*
- *DB2 Administration Guide*
- *DB2 Application Programming Guide and Reference for Java*
- *DB2 Codes*
- *DB2 Internationalization Guide*
- *DB2 Messages*
- *DB2 Performance Monitoring and Tuning Guide*
- *DB2 RACF Access Control Module Guide*
- *DB2 Utility Guide and Reference*

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

If you will be installing and configuring DB2 ODBC, you will need *DB2 ODBC Guide and Reference*.

If you are installing IBM Spatial Support for DB2 for z/OS, you will need *IBM Spatial Support for DB2 for z/OS User's Guide and Reference*.

If you are installing IBM OmniFind Text Search Server for DB2 for z/OS, you will need *IBM OmniFind Text Search Server for DB2 for z/OS Installation, Administration, and Reference*.

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 DB2 Query Management Facility (QMF) or some other program, and the library for that licensed program might provide all the instruction or reference material they need. For a list of the titles in the DB2 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 the same resources that end users do.

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

The material needed for writing a host program containing SQL is in *DB2 Application Programming and SQL Guide*.

The material needed for writing applications that use JDBC and SQLJ to access DB2 servers is in *DB2 Application Programming Guide and Reference for Java*. The material needed for writing applications that use DB2 CLI or ODBC to access DB2 servers is in *DB2 ODBC Guide and Reference*. The material needed for working with XML data in DB2 is in *DB2 XML Guide*. For handling errors, see *DB2 Messages* and *DB2 Codes*.

If you are a software vendor implementing DRDA clients and servers, you will need *DB2 Reference for Remote DRDA Requesters and Servers*.

Information about writing applications across operating systems can be found in *IBM DB2 SQL Reference for Cross-Platform Development*.

System and database administration

Administration covers almost everything else. *DB2 Administration Guide* divides some of those tasks among the following sections:

- DB2 concepts: Introduces DB2 structures, the DB2 environment, and high availability.
- Designing a database: Discusses the decisions that must be made when designing a database and tells how to implement the design by creating and altering DB2 objects, loading data, and adjusting to changes.
- Security and auditing: 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.
- Operation and recovery: 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.

DB2 Performance Monitoring and Tuning 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.

If you will be using the RACF access control module for DB2 authorization checking, you will need *DB2 RACF Access Control Module Guide*.

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, 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, 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 *DB2 Codes*, which list 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*, *DB2 Messages*, and *DB2 Codes*.

Notices

This information was developed for products and services offered in the U.S.A.

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This information is intended to help you interpret codes that are issued by DB2 Version 9.1 for z/OS. This information also documents General-use Programming Interface and Associated Guidance Information provided by DB2 Version 9.1 for z/OS.

General-use Programming Interface and Associated Guidance Information

General-use Programming Interfaces allow the customer to write programs that obtain the services of DB2 Version 9.1 for z/OS.

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Glossary

The glossary is available in several locations.

- The Glossary topic in the Information Management Software for z/OS Solutions Information Center.
- In most printed product manuals and the corresponding PDFs.
- In the BookManager edition of the *Administration Guide*.

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Codes

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